

MAR 4 1940

# THE AMERICAN School Board Journal

## BEGINNING OUR 50th YEAR



A look backward over the years is valuable only insofar as it provides a perspective of the present situation and suggests the way to future progress. It is with this idea in mind that the *American School Board Journal*, which is entering upon its fiftieth year of publication, presents a series of articles by distinguished educators and leaders in school administration, school architecture, and school equipment: Dr. N. L. Engelhardt, Dr. Emery M. Foster, H. C. Roberts, H. W. Schmidt, Dr. W. S. Deffenbaugh, Dr. Edw. A. Fitzpatrick, Dr. Henry Eastman Bennett, C. G. Campbell, R. A. Brackett, Herman W. Nelson, A. J. Nystrom. These articles review the notable problems and progress between 1891 and 1940.

If the *Journal* has been of service to the school boards and school executives of the United States since its inception, we hope that this issue will reflect our determination to become increasingly effective in the cause of democratic school administration.

WILLIAM GEORGE BRUCE

*Founder and Editor*

MARCH, 1940

GOLDEN ANNIVERSARY NUMBER



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# THE AMERICAN School Board Journal

A Periodical of School Administration

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MARCH, 1940

## Table of Contents

School Administration Then, Now, and Tomorrow.....	21
<i>N. L. Engelhardt</i>	
Growth of the American School System Told in Statistics.....	24
<i>Emery M. Foster</i>	
The School Business Executive as Seen Today and Tomorrow.....	26
<i>H. C. Roberts</i>	
The Story of a Publication.....	28
<i>William George Bruce</i>	
Fifty Years in School-Building Design and Construction.....	31
<i>H. W. Schmidt</i>	
Vacuum Cleaning in the Schools.....	36
<i>R. A. Brackett</i>	
School Heating and Ventilating During the Past Fifty Years.....	37
<i>Herman W. Nelson</i>	
Some Developments in City School Administration During the Past Fifty Years.....	39
<i>W. S. Deffenbaugh</i>	
Fifty Years of School Seating.....	41
<i>Henry Eastman Bennett</i>	
Scientific Laboratory Furniture During the Past Fifty Years.....	44
<i>C. G. Campbell</i>	
The School System and the City.....	46
<i>Edward A. Fitzpatrick</i>	
Pulaski High School, Milwaukee.....	51
<i>G. E. Wiley</i>	
Central or State Government Control of Local Authorities.....	59
<i>Theodore L. Reller</i>	
Fifty Years of School-Map Making in America.....	61
<i>A. J. Nystrom</i>	
Techniques in Supervision for the Small High School.....	64
<i>Charles Wells, Jr.</i>	
Implementing Dr. Enlow's "Equal Pay for Men and Women? Yes! Equal Salaries? No!".....	66
<i>E. H. Hanson</i>	
Rural-School Water Supply and Sewage Disposal.....	103
EDITORIALS:	
School Directors Who Direct.....	62
Shall School Personnel Unionize?.....	62
Going Out of Town for a Superintendent.....	63
The School-Administrative Task of the Year.....	63
School Business Administration.. 70	
School Board Conventions..... 73	New Rules and Regulations..... 93
Teachers' Salaries..... 76	New Books..... 96
School Finance and Taxation.... 78	School Board News..... 100
School Law..... 82	School Hygiene Notes..... 103
School Building News..... 83	News of Superintendents..... 113
Teachers and Administration..... 86	Personal News of School Officials 114
School Administration News..... 88	After the Meeting..... 126
	School Buyers' News..... 126

## A HALF-CENTURY ACHIEVEMENT IN SCHOOL ADMINISTRATION

When the story of popular education in the United States is written, it will be found that the fifty years between 1890 and 1940 were notable and significant in the especial field of school administration.

It was during this period that popular education received its best impulse through the upbuilding of the administrative structure which guided its destinies. That structure was strengthened and refined from a simple but cumbersome mechanism to a dynamic institution. Hazy conceptions were brought into clarity and intelligent direction.

The organization, the techniques of action, and the commonly accepted precedents of the board of education of today exemplify the achievement of a half century of progress. The confused and misty conceptions of a former day as to the duties of the school-board member, in his individual and collective capacity, have given way to a rational understanding as to his scope and function. The various relationships have been defined.

The modern school superintendent has come into his own. He is no longer a recording clerk or an administrative understudy to the board members, but he is a social engineer and a professional executive entrusted with broad authority to guide the educational labors of a school system. The business and educational labors of the school system have been unified for the educational and social ends of the schools.

In the half century of progress in the field of school administration, THE AMERICAN SCHOOL BOARD JOURNAL has participated in a satisfactory degree. The publication has done its share toward the building and rearing of the administrative structure which is designed to provide better administration and supervision, more effective instruction, better schoolhousing, and a more helpful business administration. From month to month, the best thought and the useful innovations in the government of the nation's schools have been assembled, given expression in the reading and advertising columns, and thus conveyed to the school administrators.

The publisher and editor points with satisfaction to the record made by the JOURNAL, and presents this number with the thought that some significant aspects at least of a half-century progress in school administration will be unfolded in the articles prepared by a distinguished group of writers.

The finest compensation which comes to us is found in the consciousness that our efforts covering a period of fifty years found acceptance throughout the nation. For this recognition we are grateful.

WILLIAM GEORGE BRUCE, EDITOR

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The contents of this issue are listed in the "Education Index."

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This clipping from the Johnson advertisement in the AMERICAN SCHOOL BOARD JOURNAL for May, 1891, describes "Control by Johnson" in the language of nearly fifty years ago.

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# THE AMERICAN School Board Journal

Volume 100, No. 3

MARCH, 1940

Subscription, \$3.00 the Year

## School Administration Then, Now, and Tomorrow

N. L. Engelhardt<sup>1</sup>

Before me lies a copy of Volume I, No. 1 of the AMERICAN SCHOOL BOARD JOURNAL devoted to school boards, school officials, and teachers. Its date is March, 1891; its price twenty cents. It would be exceedingly interesting to school administrators throughout the country to have a copy of this valuable number. Perhaps the editors will reproduce it for widespread distribution. Here are reported school-board meetings, educational innovations, book reviews, inventions in equipment, interesting personnel notes, and pertinent editorials. The names appearing here represent many who have passed away but, in many cases, they are the names of those who have contributed significantly to the advancement and improvement of school administration in this country.

Of very great interest to the administrator of today are the topics headlined under the school-board procedures of the cities of the country. In Baltimore, Md., the major issue was "to regulate advancements of teachers in the public schools" so that improvements and efficiency of the public school system might be assured. "A general plan for the proposed exhibit of schoolwork next spring" was turned over to a committee as its assignment. In San Francisco, Calif., an interesting discussion among the members brings out charges and countercharges of "control of bosses." In Brooklyn, N. Y., a special committee was asked to report on "the feasibility of setting apart a suitable number of rooms in several of the public schools as evening resorts for the youth of the city, such rooms to be supplied with small libraries and such other forms of recreation as may be deemed expedient." In New York City President Hunt submitted "a copy of Senator Cantor's bill to pension school teachers." In Superior, Wis., the establishment of a "new board of education" was reported. In Philadelphia, Pa., "the committee on superintendence of the Board of Education occupied itself for three hours recently in an unavailing effort to decide upon a successor to Superintendent James MacAlister." In St. Paul, Minn., "the public school fathers are in a turmoil . . . the several hundred teachers in school have received no pay since Christmas." In Kansas City, Mo., "the Board of Education has safely towed the schools through about half of the school year only to be jabbed in the sides at last by the thorn of no funds."

Other school boards were instituting courses in manual training, improving night schools, discovering ways and means of borrowing money from the state for building purposes. Some were expressing the need for fire escapes, bemoaning the necessity for hiring substitutes in cases of teachers' absences, complaining of the evils associated with the purchase of supplies, and discussing the "propriety of teaching music in our public schools." The Cambridge, Mass., board of education was recommending "that electric lights be substituted at once for the gas lights now in use and that suitable window ventilators be provided." In Cleveland, Ohio, petitioners respectfully urged "the importance of commencing this spring the erection of the South High School building," while in

Louisville, Ky., the board was gladdening teachers' hearts by increasing their salaries. The editorials concerned themselves with "a state scheme for school books," the pensioning of teachers, the completion of a new 47-classroom schoolhouse in New York City costing \$238,000, and the annual payment of \$6,000 for public kindergartens in Cambridge, Mass.

Here was wide coverage of problems in school administration, and here were recorded the earnest efforts of laymen and school men and women to solve the ever growing problems of public education. Most of these problems recur today and, in the cities of America, school-board members and educators are spending long hours in conference and debate in the effort to secure the advancement which will spell greater opportunity for the children of America.

### Leaders in the Nineties

During the era which gave birth to the SCHOOL BOARD JOURNAL there emerged a group of stalwarts in educational administration who assumed personal leadership in various areas of the country. In Nicholas Murray Butler's interesting volume *Across the Busy Years*, he mentions this "most extraordinary group:"

They were not all philosophers by any means, but they were almost without exception scholars. They were admirable administrators and, what is more important, they were powerful personalities. I recall, for instance, men like Seaver of Boston, Marble of Worcester, Mass., and Stanley Hall of Clark University, Tarbell of Providence, Rounds of New Hampshire, Balliet of Springfield, Cole and Downing of Albany, Emerson of Buffalo, Maxwell of Brooklyn, MacAlister, first of Milwaukee and then of Philadelphia, Lyte of Millersville, Pa., Schaeffer of Pennsylvania, White of Cincinnati, Jones and Rickoff of Cleveland, Corson of Ohio, Colonel Francis W. Parker, Albert G. Lane, and Orville T. Bright of Chicago, Dougherty of Peoria, Ill., Brown of Bloomington, Ill., Cook, first of Normal and then of DeKalb, Ill., Bryan of Indiana, Gilbert of St. Paul, Shepard of Winona, Minn., Kiehle of Minnesota, Seerley and Sabin of Iowa, Boone of Ypsilanti, Mich., Taylor of Emporia, Kan., Greenwood of Kansas City, Soldan of St. Louis, Canfield of Nebraska, Fitzpatrick of Omaha, Gove and Smiley of Denver, Preston of Mississippi, Payne of Nashville, Tenn., J. H. Phillips of Birmingham, Ala., Edwin A. Alderman, then of Chapel Hill, N. C., Charles D. McIver of the State Normal School at Greensboro, N. C., Cooper of Texas, and Elmer E. Brown of Berkeley, Calif. All these men were always ready to sit about a table and to consider open-mindedly and with great seriousness any problem or proposal which might be brought forward for discussion. They were the real leaders of a profession and they represented that profession not only before their several constituencies but before the nation. These men differed widely, sometimes sharply, in fundamental principle and in respect to some contemporary policy, but that did not interfere with their personal relationships. They were on terms of great intimacy and friendship, and through their co-operation accomplished a vast task for the improvement of education in the United States.

Outstanding among these men were Maxwell of Brooklyn, MacAlister of Philadelphia, Soldan of St. Louis, and Greenwood of Kansas City. Those four men differed greatly in temperament and in outlook, but each of them held the school system of his city in the hollow of his hand. He not merely administered it—he really directed it, guided it and inspired it. These men were thinkers, and they had both the time and the willingness to think (pp. 200, 201).

Evidently school administration during the 1890's and the first

<sup>1</sup>Professor of Education, Teachers College, Columbia University.



decade of the twentieth century was largely a matter of individual skill in leadership. This group of men accomplished for the last part of the nineteenth century what Horace Mann, Henry Barnard, Samuel Lewis, and John D. Pierce were able to do in the earlier decades of that century. Pitkin<sup>2</sup> shows that the recurring depressions of the nineteenth century had left substantial gains for public education, expenditures were increased, better laws relating to the schools were enacted, normal schools were established, requirements for certification were raised, superior compulsory-education requirements were laid down, provision was made for the education of the physically and mentally handicapped, and entire state school systems were reorganized.

This author also shows that following the panic of 1893 there were large increases in the total expenditures for public schools, teachers' salaries gained significantly in purchasing power, school terms were lengthened, and considerable progress was made in educational legislation. The judgments of this extraordinary group of educational leaders were respected. They formed their judgments out of conference and debate and willingly and frequently fought the battles of public education in public forum and public press.

During the 1890's elementary-school enrollments increased. The high schools were beginning to establish themselves as strongholds of education in their respective communities. Attendance divisions were learning how to enforce the law, significant extensions were being made to the curriculum, and the need for greater professional training was being stressed. The high schools were agencies for selected students who were beginning to be accepted into the undergraduate college bodies. The kindergarten program was being promoted vigorously in various parts of the country, and the possibilities of educational measurement were slowly being brought to light.

Special training was not available for the administrator. The school superintendent moved through the positions of teacher, principal, and chief executive. School business administrators were being placed in office, not on the basis of knowledge or training in education but because of previous political or business affiliations and with the recognition that boards of education were finding the financial and business problems of school administration too voluminous and too intricate for solution.

### Functions of Boards Adjusted

The initial struggles between the professional worker and the layman for adjustment of power and control in public education were being fought at this time, and the commonly accepted line and staff organization for the administration of education was emerging. The Maxwells, the Soldans, and the Greenwoods played a very significant part in making the distinction between the legislative or policy-making functions of boards of education and the executive or professional responsibilities of the superintendents of schools.

The first decade of this century witnessed the reorganization of the State Education Department as the University of the State of New York, with its responsibilities in the field of elementary and secondary education as well as in collegiate and university education. Andrew Draper, the first State Commissioner of Education under this reorganization, did much to set patterns for state school administration throughout the nation. His fearless leadership and forceful pronouncements were evident in many subsequent improvements of state administration.

School administrators were beginning to seek professional training and guidance. The lack of professional literature and professional curriculum for the school administrator has been well told by Dean Emeritus James E. Russell of Teachers College. A prominent school superintendent of this first decade, when asked to give a semester's course for school administrators, candidly admitted that he had material enough only for a two weeks' session. Professional literature for the administrator was, however, in the making. A group of young men aspiring for the doctorate were preparing dissertations in many important areas. Cubberley was writing his volume on "School Funds and Their Apportionment," Elliott was analyzing "Some Fiscal Aspects of Public Education

in American Cities," while Swift was preparing his initial study on "Public Permanent School Funds in the United States." Strayer was making the first thoroughgoing analysis of "City School Expenditures," Payne his comparative study of "Elementary Curricula in America and European Countries," Stone was analyzing the "Arithmetical Abilities," and Snyder "The Legal Status of Rural High Schools in the United States." Suzzallo and Dearborn, Bachman and Farrington, Snedden, Coursault, Ruediger, and others were making their years of graduate study count for improvement in the entire field of school administration.

The influence of this rapidly developing research in school administration can be easily traced in the character of the committees and the resolutions of the Department of Superintendence. A new emphasis was being placed upon finance and accounting, and the Committee on Uniform Records and Reports was soon to issue its first pronouncement. Renewed stress was placed upon child study and psychology. Salaries and working conditions for teachers were being studied, equality of educational opportunity was becoming a slogan and a concentration of attack was centered around school consolidation, educational standards, curriculum improvements, and the characteristics of administration.

In this constructive period previous to the world war Ayres and Keyes, Thorndike, van den Berg, and others were creating new professional interests around the problems of promotion and retardation, elimination and acceleration of children in their progress through school. Age-grade studies became the fad and led to significant improvements in the adjustment of curriculum to children's needs, and the improvement of promotional methods. In this period many other significant names emerge as contributing to the development of a new science in education. Judd and Coffman, Morrison and Jessup, Bobbitt and Holmes, Bagley and Buckingham are only a few of the many outstanding leaders whose influences first began being felt at this time in the history of school administration. The contributions of these leaders to scientific method were soon recognized by the lay public.

The layman's desire to know what his community schools were doing led to the development of the survey movement which has been one of the constructive forces in school administration within the past three decades. Paul Hanus, in his direction of the New York City school survey in 1911, gave a great impetus to the survey movement. Ayres, Strayer, Judd, and Cubberley soon followed and made significant contributions to survey technique. The survey volumes containing the reports of survey commissions soon became a significant part of the professional literature of every school administrator.

### The After the War Period

New emphases in school administration developed out of the participation of the United States in the world war. The use of army intelligence tests pointed to the need for wider curriculum differentiations and to the development of programs in vocational and general education. The wide disparity in educational background and knowledge of recruits from the various parts of the nation brought forth a wide acceptance of the necessity of stressing equality of educational opportunity. The great differences in the ability of the states to support public education enlisted the support of many for a federal aid movement and, as never before, there was developed a determination to stress the health and physical-education programs of our youth. National commissions were found necessary to treat of many outstanding educational problems. Leading educators throughout the nation were enlisted on these commissions to study the personnel and training programs of teachers and to suggest recommendations, to analyze school buildings and to propose changes, and to study other problems growing out of the emergency following the war and to suggest the needed remedies.

Associations of educators dedicated to special causes or particular areas of service had, in many instances, been serving over a long period of years, or were gradually in the process of formation. The National Society for the Study of Education, with its first yearbook in 1902, has contributed two significant volumes each year since that time. The reports represent the combined efforts of competent men and women in such fields as curriculum

<sup>2</sup>Pitkin, Royce S., *Public School Support in the United States During Periods of Economic Depression*, Stephen Daye Press, Brattleboro, Vt., 1933.

making, the education of gifted children, vocational guidance, the junior high school, the minimum essentials, and other equally important areas. The National Association of Public School Business Officials has issued its annual proceedings since 1911 and in later years its special reports on insurance, accounting, and the like. From the committees of the Department of Superintendence, now the American Association of School Administrators, have come 17 significant yearbooks on such important topics as elementary-school, junior- and senior-high-school curricula, supervision, character of education, the problems of youth, social change, and critical problems of school administration. For the past twenty years there has been quite a deluge of yearbooks and reports from these and other professional associations.

The period after the war has witnessed the consolidation of professional effort in performing professional tasks, the recognition of the need for wider education on the part of all participating in public education service, and the development of agencies designed to improve the training of workers and to secure greater efficiency and adaptability in the performance of educational service.

The decades following the world war brought a rapid advance in the professional training of all professional workers in school systems. The Department of Superintendence, reporting in its eleventh yearbook in 1933, showed that approximately 57 per cent of all superintendents held a master's degree at that time as compared with 32 per cent ten years earlier. Since 1933 the percentage holding masters' degrees has no doubt grown perceptibly as well as of those who hold the degree of doctor of philosophy or doctor of education. The widespread demand throughout the nation for additional professional training can be associated with the significant research contributions made by the professional schools of the country, the rise of outstanding teachers in the schools of education in the nation, the intensive national emphasis upon the needs of individuals, and democracy's desire to enhance the dignity of human personality.

During the first three decades of this century, the school administration units of the nation were progressively concentrating upon curriculum improvement, the betterment and enlargement of the school plant, the adaptation of increased knowledge in teaching methods to the improvement of classroom practice, the increase in teacher training and its accompanying advance in remuneration, the protection of teachers on the job through tenure and pension provisions, and the approach to sanity in educational measurements.

In the college laboratories and the broad field of educational statesmanship problems of financial support by state and nation were being advanced through the significant contributions of Mort and his disciples, improved techniques were being discovered in reading, arithmetic, and the social sciences, financial accounting practices were being analyzed and improved throughout the nation, school buildings were being planned with adjustment to community need and to curriculum demands, and equipment was being adjusted to meet human as well as educational needs. There was no phase of school administration which did not have its emphasis in research and in improved practice during this period. High-school and college enrollments grew by leaps and bounds. The appropriations for education increased with intermittent recessions. Probably during no other period in the life of the nation were the people as conscious of the importance of education in advancing the interests of the people as well as in improving their advantages in our democratic social order.

### The Depression Decade

The financial depression of 1929 left in its wake many of the evil effects associated with some of the reports found in the first edition of the *SCHOOL BOARD JOURNAL*. In this early edition appear such headings as "bankrupt school board," "short of funds," and "the dismissal of teachers." Financial adjustment following the depression brought new emphases and new solutions for problems. National acceptance of responsibility resulted in the formulation of the Civilian Conservation Corps and the National Youth Administration which, through actual support and subsidy, gave new hope and new opportunities to thousands of boys and girls.

In local school systems so-called economies frequently resulted in the elimination of the educational gains made in previous decades. Teachers' salaries were reduced, and the payless payday became altogether too frequent. New stress was laid upon the interpretation of the principles of democracy, and the practice of those principles. During this decade leadership sought to become more democratic. It endeavored to recognize the potentialities of all coworkers in school systems and to make the school systems a truly cooperative enterprise in which participation by all who were competent was being fully encouraged.

The past decade has witnessed heroic professional efforts to maintain the gains of the past and to advance better educational programs, even under financial stringencies. History will record this decade as witnessing the high professionalization of administrators and teachers in general, the better adaptation of educational programs to individual needs, the wider acceptance of society's obligation with reference to equality of opportunity for all children of the nation, and the application of research to reduce costs as well as to improve practices. The shift in educational nomenclature appearing in books and periodicals indicates the commonly accepted change in educational values. Guidance took on new meaning and new importance. Teacher participation in administration was frequently reviewed. The significant contributions of the scientific movement in education over the past four decades were being sought so that their effects might be better understood. That the area of child development had produced its experts was evident, and integration of subject matter and the expansion of general education furnished the topics for many professional conferences and college classroom discussions.

The literature of educational administration moved forward with leaps and bounds. Comprehensive professional texts were issued covering all of the major and many of the minor areas in administration. Fred Engelhardt, Graves, Newlon, and others presented general texts covering new interpretations beyond Cubberley's original significant contribution. Smith, Reeder, and Engelhardt brought together for the first time comprehensive treatises on school business administration. Mort issued his significant volumes on federal and state support. New volumes on the school law, teachers' salaries, the American high school, the public elementary-school plant, democracy and the curriculum, integration—its meaning and applications, and countless other topics contributed their share to strengthening the foundations of the profession and to the enhancement of its scholarly and scientific nature.

### What of the Future?

The school administration of tomorrow will be confronted with new problems. It will inherit many of the old. The year 1939 ended with a large part of the world in armed conflict. It is a conflict of social and economic ideologies, with the American people strongly entrenched to defend the principles of democracy. The results of European and Asiatic conflicts will have their repercussions in America both economic and social, and, in the last analysis, will have their effect upon the administration of schools in the American nation. Probably no administrator in the next decade will be proud to state that he holds "the school system of his city in the hollow of his hand."

School administration must become, and will become, more democratic. This implies better and broader training for all teachers, and the schools of education in this country will be in a position to provide that training. The changes occurring in urban as well as rural life will vitally affect school administration. Many school systems will expand their programs to include nursery schools and junior colleges. Schools themselves will become community centers to a greater degree than ever before, offering adult guidance and training and opportunities for social, cultural, and recreational accomplishments. The urban decentralization will continue to operate, necessitating rethinking the problems of educational leadership in old as well as new centers. Slum clearance and the construction of inexpensive modern homes will vitally affect local support for education. This, and other causes, will necessitate new considerations of state and federal aid.

The decrease in birth rates, the present diminution in ele-



mentary enrollments, and subsequent decreases in high-school enrollments will affect vitally teacher outlook and the problems of teacher training. Adult education will have an importance in the years to come far above and beyond anything conceived in the past, and school buildings must be planned in terms of adult as well as child use. The safeguarding of every child born into our society to the end that he may contribute most completely to the needs of our society will be stressed increasingly in the guidance, curriculum, and methods phases of the educational program. Insofar as possible, education will strive to remove handicaps, especially those of a social and physical nature.

The school curriculum will no doubt undergo significant change with greater stress upon adaptation to environment and the utilization of the worth-while elements in the environment for the enhancement of living. In the years that lie ahead education will assume an even more important role than it has in the past in the life of our nation, and school administration will be charged with making the curriculum adjustments, providing the trained teachers, envisaging the plant needs, and contributing the leadership for

financial understanding and support of the educational program. As never before, measurement will be applied to assure the proper accounting for money as well as goods and equipment, the safeguarding of funds, the distribution of the financial burden, and the accomplishment of the proposed aims. With the spreading of the tax base, democracy must still be maintained, local initiative must be conserved, and the rights and privileges of the individual must be protected.

In the next decades school administration may be expected to move forward with significant adjustment of education to the needs of the society which it serves. The nation may be confident that the leadership in school administration in this nation is competent to carry on.

As the years roll on the AMERICAN SCHOOL BOARD JOURNAL may also be expected to present the pertinent issues in school administration as they arise in this nation and to continue to take strong editorial positions advancing the interests of the American people in our democracy and providing for the education of our children and for adjustment under our happy form of social order.

## Growth of the American School System Told in Statistics

Emery M. Foster<sup>1</sup>

One of the most significant developments in the United States in the fifty years from 1890 to 1940 has been the quantitative growth of education, especially public education.

### Enrollments

In 1890 the total enrollment in day-school work in the public and private school systems from kindergarten through college, was approximately 14,696,000. In 1940 approximately double this number (29,525,000) are estimated to be enrolled in these same types of schools. The rate of change in enrollments however has been quite different at the various levels of education as shown in the following table.

School Enrollments, 1890-1940

Year	Elementary	Enrollment High School	Higher Education
1890 .....	14,181,415	357,813	156,756
1900 .....	16,224,784	695,903	237,592
1910 .....	18,228,264	1,111,393	355,215
1920 .....	20,864,488	2,494,676	597,857
1930 .....	23,588,479	4,799,867	1,100,737
1940 (Est.) .....	21,484,583	6,663,861	1,376,000
Percentage increase ..	51	1762	777

In 1940 elementary-school enrollments will be only one and one half times as large as in 1890, but high-school enrollments will be 17 times greater and college enrollments 7 times greater than in 1890.

Another measure of growth is the percentage of the population of school age that is enrolled in school. In 1890 as high as 93 per cent of the group from 5-13 seem to have been in school at some time during the year (ratio of enrollment to number in U. S. Census age group). At present probably 95 per cent or more of this group are in school. The situation is quite different when we consider the high-school and college levels. The percentage enrolled of the high-school group (ratio of enrollment all ages to U. S. Census 14-17 years of age, inclusive) has increased ten times in 50 years, from 6.68 per cent to 67 per cent. In the college age group, the percentage has increased about four times in 50 years, from 3 per cent to over 12.

### Public versus Private Education

In 1890 privately controlled education accounted for a much larger percentage of the total number enrolled than at present.

<sup>1</sup>Chief, Division of Statistics, U. S. Office of Education.

In the 50-year period, for elementary grades, this percentage has changed from about 12 per cent to 10 per cent, for high-school grades from 40 per cent to only 6.5, and for higher education from 70 per cent to 41. For the grand total, however, the percentage has only changed from 13 per cent to 11, due to the small change on the elementary level.

### Length of Term in Public School System

In 1890 the average length of the school term was 135 days, with one state having a term of only 59 days. At present, 50 years later the average term has been increased by about 40 days or two full school months and no state will have schools in session on the average for fewer than 142 days. The minimum therefore in 1940 will exceed the average in 1890 by 7 days and exceed the minimum for 1890 by 83 days.

### Graduates

No data are available for comparing the number of graduates from 7 or 8 years of elementary education in 1890 and 1940. High schools have graduated approximately 19,396,000 students in the past 50 years, including over a million each year beginning in 1936. Only 43,731 were graduated in 1890.

The percentages of the adult population that were college or high-school graduates in 1890 are not known but today between 3 and 4 per cent are college graduates and over 15 per cent are high-school graduates, including those who have continued their education beyond high school.

The steady increase since 1890 in the number of annual college and high-school graduates has raised the educational level of the adult population which today is graduation from elementary school. While some 1,300,000 adult persons are dying each year, many of whom did not have more than an incomplete elementary-school education, they are being replaced by approximately 2,000,000 who became 21 years of age, of whom a million are high-school graduates and 150,000 are, or soon will be, college graduates. In the year 1890 only 14,306 persons were graduated from college.

### Holding Power of Schools

To attain high levels of education for the population as a whole the schools must be able to attract and hold pupils. The increase in holding power over 50 years is shown by the fact that in 1890 about 96 per cent of the total enrollment was in elementary grades,



3 per cent in high-school grades, and 1 per cent in higher education. Today these percentages are approximately 72, 23, and 5, respectively.

### Curriculum Offerings

In addition to the increase in the number of subjects taught at the elementary-school level especially in the upper grades, there has been an astounding diversification and expansion of the high-school offerings from the very narrow college-preparatory curriculum in 1890, in which year enrollments were reported to the Office of Education in 9 subjects, Latin, Greek, French, German, algebra, geometry, physics, chemistry, and history, probably assuming that all students studied English in one form or another. At present more than 110 subjects are rather universally offered in our public high schools and 100 others are offered somewhere in from 1 to 14 states. The public high school has changed from a preparatory school for a few professions to a university for the people.

### Growth of Junior High Schools

Junior high schools, as we know them, did not exist in 1890. Beginning about 1900 the movement for reorganization of the high schools has progressed until today over 8,575 schools of the junior, junior-senior, or undivided 5- or 6-year types offer work in the 7th and 8th grades as a part of the high-school system. This is one third of all the public high schools which number about 25,500. Nearly 35 per cent of all the 7th- and 8th-grade pupils are enrolled in the reorganized school systems.

### Growth of the Junior College

Very few 2-year colleges, not normal schools, existed in 1890 and the term *junior college* was not used until after 1896. Today, however, there are more than 550 such schools enrolling over 155,500 students, including those in 1-year junior colleges. Approximately 110,000 of the junior-college students are in public junior colleges, the first one having been founded in 1904.

### Teachers

One of the changes that has taken place with respect to teachers in the past 50 years is the shift from men holding more than one third of the positions to men holding only one fourth of them. The proportion of men teachers has been slowly increasing in the past decade.

Teachers, 1890 and 1940 (est.) Public and Private Schools

Teaching in:	1890		1940 (est.)	
	Men	Women	Men	Women
Elementary schools	129,734	253,074	57,023	582,476
High schools*	6,920	9,409	138,521	188,307
Higher education	10,433	2,783	80,068	29,702
Other schools	2,341	2,387	2,996	7,323
Total	149,428	267,653	278,608	807,808
Grand total	417,081		1,086,416	

### Receipts for All Education

No data are available on the receipts for all education in 1890 but in 1900 the total income was \$249,825,377, distributed as to source as follows:

Source	Amount	Per Cent
Federal Government	\$ 5,852,257	2.4
State governments	63,705,589	25.5
Local governments	149,486,845	59.8
Private sources	30,780,686	12.3

In 1936, the latest year for which similar data have been assembled, the total income was \$2,712,194,860, distributed as follows:

Source	Amount	Per Cent
Federal Government	\$ 53,083,278	1.9
State governments	698,534,727	25.8
Local governments	1,610,062,196	59.4
Private sources	350,514,659	12.9

The similarity of the percentage distribution for these years is very noticeable and shows that the underlying philosophy of support for education has changed very little in almost half a century.

It is probable that the 1940 data will show an increase in percentage of state support.

Using the quadrennial years only, 1900, 1904, 1908, etc., to 1936, federal support dropped to 1 per cent in 1928 and the percentage was never higher than the 2.4 per cent in 1900. State support rose to 27.5 per cent in 1908 and dropped to 17.6 in 1920. Local support rose as high as 68.7 per cent in 1928. Private support dropped to 9.2 per cent in 1908 and rose to 14.5 in 1916. Considering that the amount of money involved has increased in approximately 40 years by over 1,000 per cent, such small proportional changes in sources of funds, show the relative financial stability of our educational system.

### Receipts for the Public School System

For the public elementary- and secondary-school systems only, there was a definite decrease in the proportion of state support from 1890 to about 1930 and an increase in the proportion of local support as shown in the following table.

Revenue Receipts for Public School System  
Per cent of school funds from:

Year	State Taxes and Appropriations	Local Taxes and Appropriations	Permanent Funds and Lands	All Other Sources
1890	18.4	67.9	5.4	8.3
1900	17.2	68.0	4.2	10.6
1910	14.9	72.1	3.2	9.8
1920	13.8	78.2	2.7	5.3
1930	15.8	78.8	1.3	4.1
1938	28.8	67.5	1.1	2.6

While figures for 1940 are not yet available, indications are that increases in state aid to schools have amounted to more than decreases, and therefore the proportion of receipts from the state will probably be slightly greater in 1940 than in the previous years. The total receipts for the public school system in 1890 were \$143,110,218. In 1940 they will be over \$2,201,000,000.

### Expenditures for Education

Total expenditures for all education as reported to the U. S. Office of Education have not been compiled for years previous to 1910. The following table shows the progress of expenditures since then.

1910	\$ 626,668,057
1920	1,307,868,353
1930	3,234,638,567
1938 (est.)	3,027,000,000

From 1930 through 1934 there was a continual decrease in expenditures for education, since then there has been an increase.

For the public school system, expenditures have increased from \$140,500,000 in 1890 to over \$2,153,000,000 in 1938. The increase was continuous for 40 years, until 1930, after which there were decreases until 1934.

Expenditures for Public Elementary and Secondary Schools  
(Current expense, capital outlay, and interest)

Year	Amount
1890	\$ 140,506,715
1900	214,964,618
1910	426,250,434
1920	1,036,151,209
1930	2,316,790,384
1938 (est.)	2,153,000,000

In the continuous increase however it was not until 1913 that the total expenditures exceeded half a billion, and in 1920 one billion. By 1922 it went over one and a half billion and in 1926 over two billion, reaching its peak in 1930.

### Cost per Pupil

The cost per pupil has, of course, not increased in the same proportion as the total expenditures, but has constantly increased as school terms became longer and the quality and quantity of education improved.

Year	Cost Per Pupil
1890	\$ 17.23
1900	20.21
1910	33.23
1920	64.16
1930	108.49
1938 (est.)	96.00

\*In 1940 includes junior high schools.

### Investment in School Property

The first compilations of data on investments in school property and productive funds were for 1910, at which time the plants owned by the public school system, private elementary and secondary schools, and universities and colleges were valued at \$1,660,000,000 and the productive funds (endowments) at \$601,209,000. The latest data available show over \$10,116,000,000 invested in school property and over \$2,237,000,000 in endowment and other trust funds. This is an increase of 500 per cent in amounts invested in property and about 275 per cent in the value of endowment and other trust funds.

### Education — One of America's Greatest Enterprises

With one in every four persons in the entire United States engaged on a full-time basis in getting an education, the provision

of the personnel, buildings, equipment and supplies, including the training of the personnel, the manufacture, selling, transportation, and storage of the materials, the handling and accounting for the funds, etc., constitute one of the major businesses in the Nation. Because of its fundamental necessity and importance in a democratic form of government, in which the individual must be able to do his own thinking, the gross cost of so great an undertaking should not unduly alarm us.

When the total annual cost of all public and private education is reduced to a daily cost per adult, or potential voting citizen, it is less than 10 cents a day. Can we invest 10 cents a day in anything more valuable than in the business engaging one fourth of our total population, a business to guarantee the continuous raising of the educational level of the voting citizen which even today, with all that has been done in the past, is probably only graduation from elementary school?

## The School Business Executive as Seen Today and Tomorrow

H. C. Roberts<sup>1</sup>

Preliminary to focusing attention on the school business executive of today, it might be well to indulge in a backward look upon the handling of business affairs in the schools of yesterday. Here we find in charge an official of legal standing who, judging from the scope of his work, was one of the busiest of all public officials. He was the keeper of all records and books of account; he audited and paid bills, handled finances including the issuance and retirement of bonds and the payment of interest thereon; he issued purchase orders and executed contracts; he was responsible for the distribution of educational and janitor supplies, the making of pay rolls and the payment of salaries; he conducted school elections and school-census enumeration. The district clerk, this individual of many duties and activities, had been transplanted into his important post directly from a position of bookkeeper or clerk in an insurance office or a grocery store.

While it is true that the school-board members of yesterday personally directed a large percentage of all business transactions, supervised the hiring and firing of employees, ordered repairs and purchases, yet the clerk impresses us as responsible for details of business to an extent almost impossible of attainment. His passing casts no reflection upon his industry or attitude. It has been, rather, the result of the constantly increasing scope and complexity of education itself and likewise of the business affairs incident to it. While economic need has dictated a new order of affairs with a business personnel of specialized knowledge and experience to meet current conditions, yet in all sincerity, we would pay our respects to the forerunner of the school business executive, the man-of-all-work, the district clerk.

The school business executive of 1940 is

seen today in various lights through the eyes of various people in various positions, but by all in terms of present methods and procedures in relationship to those of yesterday. He sees himself as a party to, and a part of, a new and professional business aid to the aims and program of education. He recalls to mind the haphazard basis of his own selection to his position and the necessary consequent uncertain, trial-and-error methods of his beginning and development, and the necessity of his starting from scratch with no formulas, no precedents, and no general acknowledgment that he was needed.

While understanding that only a good foundation has been laid upon which to build the superstructure of future business management, he yet perceives that progress has been continuous and that the trend is definitely in the direction of an adequate development of this indispensable service. In his case, necessity had dictated self-training in position because specialized education had been neither required nor attainable. The opportunities of specialized training which recently have become available are appreciated; their further development and enlargement are anticipated; a definite set of standards to include both scope of work and qualifications for position are envisioned for the near future.

### Advent of the Business Executive

The educational executive, to whom the successful business executive must always bear the relationship of attendant, thinks back a generation to his then suspicions and fears, often justified, of this new official, lest a movement be under way by which the business and financial interests of the school system should attempt to dominate and control educational policies and programs. He realizes that his mind has, for the most part, come to ease as he has found that support and aid, rather than

domination, have constituted the purpose and aim of his coworker.

Reflection over the period of transition brings a realization of his own relief from responsibility for the vast amount of complex business detail incident to the conduct of his program. While not yet satisfied that the business executive is a finished product upon whom full confidence can be placed, he sees the time ahead when his entire thought and attention can be devoted to the primary aims of education, that of the best means of developing children into the most useful and happy type of adults and citizens.

Likewise school-board directors, who a generation ago bore the personal responsibility for supervising, if not actually performing, the duties of purchasing supplies and equipment, construction and maintenance of school buildings, finances and other necessary business, and who have found that it is feasible to delegate these details, important as they are, sees the business executive as having cleared the way for them to devote their time, experience, and judgment to the formulation of policies, with the assurance that these policies are honestly and efficiently executed.

### A Growing Task

To date, the public as a whole has evidenced but slight interest in, and have failed to see clearly the importance of, the school business executive. Their rapidly awakening consciousness to heavy and increasing taxes, however, and the organized activities of taxpayers' leagues in particular, give indication that he is becoming better known, with a critical, though friendly interest. In an increasing degree, analysis of his entire program and of his individual transactions constitute a part of the supervision now being inaugurated by groups of qualified business and professional men, aided by business analysts and

<sup>1</sup>President, National Association of Public-School Business Officials.



accountants. The public is seeing today, mainly through the efforts of these groups, the good and the bad in existing local conditions. The trend is a healthy one and its expansion promises to be of great assistance to the schools, through the support of honest efforts and effective practices and in the exposure of corruption and inefficiency.

The business executive is perhaps best and most impartially seen today through the eyes of those who have made competent study and research of his work from its beginning to the present time. The findings of a director of educational research in one of our great universities, indicates in summary: first, and of foremost importance, that the business executive now recognizes himself of service only as his work becomes an integral part of the whole educational program in serving the youth of the nation. He further finds that changes have recently taken place, to include: better budgeting practices for obtaining, safeguarding, and distributing school resources; more efficient means of administering school textbooks, supplies, and equipment; better procedure for selecting and purchasing school sites; better technique for operating and maintaining school properties; greater safety, comfort, convenience, and economy in transporting pupils; more efficient accounting, auditing, and reporting procedures; better selection of business personnel on the basis of merit and qualifications; systematic pay-roll procedures. His conclusion is that these changes have resulted in the savings of millions of dollars each year, and have opened the way for improvements in education itself. Basic in his research findings is the fact that business management, in this as in any other enterprise, can be no better than the business executive himself. Regret is expressed that many school districts have not yet seen fit to realize this fact and to insist upon thoroughly competent and capable heads for the conduct of their business affairs.

### Business Executive of Tomorrow

Through the eyes and thinking of tomorrow, just how will business executives of today appear? Any forecast can be projected only on the basis of current trends, together with the certainty of continued need for further development and expansion of these trends. Any institution or position of 1940 will be seen in tomorrow's retrospect in accordance with the extent and character of changes which have taken place in the intervening period. We must first know the business executive which tomorrow has produced, and in turn the conditions of public requirements and demands which have been instrumental in his production. To this end, let us turn forward to the files of the AMERICAN SCHOOL BOARD JOURNAL, Volume 180, for a typical example.

An extract from *News of School Executives*, published in May 1980 will read:

The Board of Education of Futura, W. P., (population 490,000) announces the election of John P. Gray as Business Executive of the School District, to fill the vacancy created by the resignation of Richard Brown, recently selected by the State Department of Education as Deputy in Charge of Business Research.

From the large group of candidates, Mr. Gray was chosen for his outstanding qualifications of preparation and successful experience. He was graduated from the School of Educational Administration of the State University in 1965, where he majored in subjects of education and social sciences. The following year was devoted to post-graduate work in the study of advanced economics, municipal government, taxation, budget and accounting practices. His first position, in which he spent five years, was that of Business Co-ordinator for the Schools of Forward County, where he achieved the complete elimination of small rural schools and the establishment of twelve large units, each with three buildings organized on the 6-4-4 plan and central heating plant, each located on a site of forty acres. His accomplishment became possible with the completion of the system of super-highways permitting the safe use of high-speed trailer buses. Each child in the county was accorded housing and educational facilities through the fourteenth grade equal to those of any city in the state, and each child became no more than thirty minutes distant from his school. These results acquired particular significance when an audit first revealed that total county school costs, in conformity with his predictions, were considerably less than those incident to the former operation of the large number of small units.

In 1961, Mr. Gray became Director of Supplies, Equipment and Purchases in the schools of Midvale, W. P., (population 200,000). Through his efforts of organization among his co-workers over the nation, a standardization for general school supplies, papers, furniture, and the binding of textbooks became accepted by the educational authorities and the manufacturers. As a result of this standardization, the number of kinds of manufactured items within these classifications was reduced 73 per cent, with a consequent decline of costs to school districts averaging approximately 11 per cent. Another generally adopted policy of early purchasing, or rather "timely" purchasing, to avoid factory peak loads and to benefit by dull periods of the market, resulted in a further material reduction in costs. For the year 1977, he served the National Association of Purchasing Agents as its president.

A year ago, Mr. Gray resigned at Midvale to accept the invitation of the State University, to assist the department of School Business Administration in a revision of its courses of study and to serve as advisor to the Director of Research.

In addition to numerous articles on various phases of school business which Mr. Gray contributed to this and other school publications, he has written two books, *The Science of Purchasing* (1975) and *Public Schools and Public Relations* (1977), both of which have found wide use among school executives and as texts in Universities.

An interesting feature in connection with Mr. Gray's selection for his new position was the active interest shown by the City Planning League, a nonofficial body of 2,500 citizens representing all organized groups of the city, whose purpose has been demonstrated to be that of collaborating with governmental units in the promotion of better practices and better public understanding. Following a study of his qualifications and record of accomplishment, the group was unanimous in urging his employment. In accordance with established custom in this city, the new official automatically becomes an advisor and consultant for the group.

Extract, *New School Legislation*, February, 1980:

The state legislature of W. P. last week passed an amendment to the Code changing the required qualifications for the position of Public School Business Executive in cities of the first class. The

State Department of Education will henceforth require for certification, in addition to the previously required college or University degree and one year's additional work in school administration, a second year's work devoted to the study of municipal government and finance, taxation and tax bases, and school law research. A lobby at the Capitol, representing the cities of the state, was insistent that the standards be raised because of the increasing complexity of school business and consequent need for higher qualifications.

As previously noted in these columns, similar amendatory legislation has been taking place throughout the past decade. To date, the Legislatures of twenty-one States and three Canadian Provinces have raised the legal standards for the position of Business Executive, each now requiring a minimum of six years University training in general specified subjects.

### Efficiency the Objective

The citizens of 1940 have awakened to the need of knowing and directing their government, and have acquired a better comprehension of the aims and programs of public education. With the many new services demanded of, and supplied by, the public schools, with the expanded program of adult education and the growth of organized recreation as the result of shortened working hours, they have come to a realization of the constantly increasing duties and complexities which have devolved upon the business executive. His is the responsibility for specialized knowledge ranging from general and specific economic problems to the best means of housekeeping; from an adequate understanding of public financing to that of utilizing the last possible heat unit obtainable from combustion; from building planning and construction to the proper specifications for a lead pencil. They have grasped the basic premise that economy and efficiency in business affairs can only be attained when administered by a business executive who in addition to being honest and of good standing in the community, is thoroughly trained and competent.

These understanding citizens, who have learned to balance their demands for efficiency in governing bodies and executives, with the contribution of their loyal support when efficiency is the objective, look back upon the business executive of 1940 and see him with a sympathetic discernment. To them, he is only another evidence of evolution in the natural and orderly growth of democratic government. They accord credit for the good beginnings made at that time, and see them as the foundation for the profession which has gradually been developed through the intervening years. Their glance into the past is, however, only a fleeting one, as their thinking turns immediately toward the future. Since they have come to see the constantly growing importance of business management in the field of education, their speculation and interests are directed to still further improvements and refinements in the technique of the business executive, whose services have become recognized as indispensable to school districts in which economy and efficiency are to be maintained.



# The Story of a Publication

William George Bruce\*

With this number this publication enters upon the fiftieth year of its existence.

It may be of some interest to those who have become familiar with its pages to learn something of its beginnings and the successive struggles which have brought it up to its present plane of efficiency, service, and completeness. It represents a life's work of endeavor — all prompted and stimulated by an ideal.

Perhaps the circumstances which suggested the idea of establishing a publication, devoted solely to school administration, should be enumerated. During the years past, the writer has frequently been asked the questions: "How did you get the idea of a school-board paper? What prompted you to establish this publication?"

## How the Idea Was Conceived

The story, briefly told, is this: The writer had, for a number of years, been employed on daily newspapers where he served in various capacities, both in the business and editorial departments, when he one day found himself elected to membership on the local board of school directors.

The elevation to an office which he held in high regard also excited in him the consciousness of an unpreparedness for the duties to be performed. He realized that he must equip himself for the task before him. He must study school-board proceedings and educational journals, visit schools and cultivate the acquaintance of teachers, master parliamentary procedure, and, in brief, learn the elementary principles of school administration.

The printed school-board proceedings of several cities and sample copies of a number of school journals were brought to his aid. He waded through bundles of printed matter without finding in any accessible or tangible form just what he was seeking.

The proceedings of boards of education proved dry and uninteresting reading. The grains of real information were buried in masses of routine matter of local concern only and difficult to recognize and single out. The school journals dealt almost wholly with classroom methods which were intended for teachers only.

It gradually became evident that there was no publication in the United States that served school-board members; there was no medium that told what the various boards of education were doing, or that dealt with any recognizable fundamentals in school administration.

Here, then, was presented an unoccupied field in periodical literature! Someone should set himself to the task of serving an actual need! There must be thousands of school officers and board members who felt that need just as the writer felt it.

Why not undertake the task? Why not establish a school-board journal? The writer became interested and then enthusiastic. The idea began to grow in his mind. But, there were also serious obstacles! He lacked training and experience and he lacked money. It would take both to launch a periodical that would prove acceptable to the members of boards of education. Then there was the danger that even a good publication might prove a financial failure.

## A Small Beginning

But, the prospective publisher reasoned, he could at least produce a periodical that would record the important doings of the various boards of education throughout the United States, publish the best expressions in school administrative thought, and thus produce a reasonably informational medium. With the passing of time, there would also come experience, strength, and stability. As publisher and editor he would have to, and could, become versed in significant happenings, and slowly develop an understanding of the more important underlying principles and problems of school administration.

Thus, in March, 1891, *THE AMERICAN SCHOOL BOARD JOURNAL*

\*Founder of the *AMERICAN SCHOOL BOARD JOURNAL*.

was born. It was a meager affair. The beginning was an extremely humble one. There were eight pages of reading matter, minus cover pages, an extremely poor halftone portrait and a few small local advertisements, which bore no relation to the school field.

The struggle for existence became hard. The publisher had, in a few months, put every spare dollar into his enterprise; he had a wife and three small children to support, and nothing but this little publication out of which to draw that support. He frequently began his day's work between four and five o'clock in the morning, and frequently did not seek rest until midnight. He was frugal and industrious. His wife practiced rigid economy and self-denial. There was an unflagging confidence that well-directed effort would eventually win.

In the earlier labors, in Chicago, a representative of a prominent school-supply house saw me one day emerging from a cheap restaurant. I was chagrined in being thus seen, and realized that it in nowise added to my prestige as a publisher. But why deny my poverty? It was true that I began my day's work in Chicago with a ten-cent breakfast consisting of a doughnut and a cup of coffee. It was also true that I could not allow myself more than twenty-five cents for a noon luncheon. Economy here was not a penurious choice; it was a matter of stern necessity.

## Some Discouragements and Rebuffs

During the initial period of the *Journal*, the publisher made weekly journeys from Milwaukee to Chicago. The latter city offered at least greater opportunities, if indeed the publication had a future. Here a day's work meant to skirmish about the city for subscriptions and advertising, with the result that when train time came in the evening I frequently returned to my home city either with empty hands or with meager returns in the day's work.

Albert G. Lane, the superintendent of the Chicago schools one day said: "There are too many school journals now, and not room for a single one more. Bruce, you better quit, go home and stay there!"

"But there ought to be a field for a publication devoted to school administration," I expostulated.

"There may be, but I doubt it!" he replied.

Some months later I managed to raise enough money to finance a journey to New York City. Through a mutual friend, I secured an interview with one of the original members of the firm of Harper Brothers, then a leading schoolbook publishing house. When I explained my project Mr. Harper smiled and said:

"There is no future for your project, Mr. Bruce. You are located in Milwaukee, which is merely a beer village. Books and beer do not mix. The educational world will not accept your product. It looks to New York, Boston, and Philadelphia for its textbooks and educational journals."

This was not an encouraging comment, coming from one who was regarded as one of the country's leading publishers and whose judgment ought to be authoritative and conclusive. However, I was not discouraged, but found some comfort in recalling an incident which had previously been reported to me during my visit East.

A New York publisher, while traveling westward had met a Milwaukee editor on the train, when the conversation turned to the periodical-publishing business.

"By the way, do you know a man named Bruce out in Milwaukee who has begun the publication of an educational magazine?"

"Yes, I know him quite well," replied the editor. "He was in my employ. I don't know much about his enterprise, but I do know the man. I have heard it predicted that he would meet with failure. But knowing Bruce as I do, I predict success for him! He is cautious and circumspect, and knows every minute just what he is doing. I have absolute confidence in his vision, his energy, and his perseverance. He will get there if there is half a chance!"

At the end of a year of hard labor, of tireless energy, of obstacles overcome, and disappointments grimly accepted, there came a break in the sky. Recognition came from various directions, meager perhaps in financial return, but rich in the assurance that the publication was filling a need and that every number was better than the preceding one. Schoolmen began to say, "Why did not someone think of this before?"

### Success Came Slowly

The future of the publication was assured. If the publisher would continue to improve his journal in typographical appearance and in the subject matter presented, hold to high standards

In the conduct of the Journal some very definite policies and principles have guided the editor and his coworkers. These have been based in part upon definite ideas of the true functions and relations of school-board members and professional officers, and in part upon the conviction that no interest of any portion of the school government, or even self-interest should interfere with the ultimate purpose of the school — the education of the child. It has been sought to promote progress by recording the doings of progressive school boards, superintendents, school-business executives, and school architects. In general, criticism has been withheld except in cases where a constructive reform could be hoped for. To attack measures, not men, has been the invariable rule.

# THE AMERICAN School Board Journal

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### SECRETARY BARRON.

The subject of this sketch, Oasian E. D. Barron, has served the Columbus, O., Board of Education for the past twelve years.

He was born in 1863 and attended the public schools until 1875, when, on account of the financial reverse of his father, he felt compelled to shift for himself, being one of a family of seven children. For three years he clerked in a store and worked at odd jobs until 1879, when he was chosen Assistant City Clerk, remaining there until 1884, when he resigned to accept a position on the editorial staff of the Daily Ohio State Journal. In April, 1885, he was unanimously chosen Clerk of the Board of Education over four competitors. This position he has held ever since, having always received the united support of the Board without regard to party affiliation. He has been an untiring, painstaking and highly competent official, and ranks as well as a public servant that through his vigorous recently to accept a position with a beneficial order of this city, the Board unanimously refused to release him. He has brought such systems into his office that his forms and methods of keeping school accounts and statistics are used in a number of large cities throughout the country. During his term of service he has handled several millions of dollars of the public money and has always accounted for the same with the most minute accuracy. He has a most extensive circle of acquaintances and enjoys the confidence and esteem of the business community. A young man of exemplary character, his genial and pleasant nature has secured him the warmest friendship with all who have made his acquaintance, either in social or business life, while his self-reliance and industrious habits have identified him with all who earn their living by their own efforts.

Last fall Mr. Barron was nominated for Clerk of Courts but being on the side largely to the minority he was defeated by about 700 votes, the customary majority on the other side being about 2500.

Mr. Barron's services to the School Board have won for him the esteem both of the press and the public.

### THE SCHOOL, ITS SANITARY REQUIREMENTS.

There is probably no topic of higher interest to school directors, teachers, scholars and the general public than an essay purporting the regulation of either party in relation to each other and to all conveniently.

Let us assume that a school-building is required somewhere in the county, and that a meeting of school directors be called for the purpose of locat-

ing and building the edifice. "What should be the leading thoughts to attain success?"

First of all, select an elevated locality with a dry, preferably sandy soil, not surrounded by low, swampy land, which germinates miasm and would endanger the health of the children.

Second. Have your building properly above



SCHOOL BOARD SECRETARY BARRON.

ground, that no miasma can communicate with the floor, and have it roomy and high for the accommodation of the children you intend to seat.

It requires 3,500 square feet of pure air for every child per hour for healthy respiration, and in default of space the contained air needs frequent change, which means ventilation, with the avoidance of draught. How can we accomplish the desideratum?

The aim of sanitarians is to bring the air contained in rooms as near as possible to the purity of the outer air, which is the standard for health. Let no perceptible difference be present when stepping from the outside into the inside of a room. No man, with disinfectants, can ever improve or surpass the health-giving, life-sustaining property of pure air.

Having before our mental eye a country school-building, where funds are limited for the introduction of the more elaborate ventilating and crumpling inventions so generally adopted in our modern large public schools: in these buildings the foul air is removed either by a suction or pushing power. Being obliged, through conditions of circumstances, to look for other relief, "What shall we do to reach the wished-for end and not exceed our means?"

Without entering into elaborate details, let us remember that there are heavy as well as light gases; that carbonic acid, or that which we exhale—breathes out—is a heavy gas and sinks to the floor, while the lighter gases rise to the ceiling. This explains the necessity of oblique ventilation—touching every strata of gas contained in the room—to bring about the desired effect without producing draught. Let a carpenter make boxes, twelve inches or more in the clear, from one and a half to two-inch planks, corresponding with the thickness of the wall, equipped with three sets of reversible slats attached to one lower, to be capable of being set at any angle to break the flow of the in and out flowing air. Let them be set six or eight feet apart, all around in the wall of the room, level with the floor and ceiling. These, when properly placed and regulated, will secure good oblique ventilation without permitting draught, which is the case when doors and windows are opened.

The walls of the rooms should be colored a light green or a neutral gray, while the ceiling had better be white, so reflecting more and purer light upon the desk of the scholars, for which purpose the windows should reach within eight inches of the ceiling. The light is best when it comes over the left shoulder for the scholars, and the side where the teacher sits and the blackboards are, should have no windows, which is the safest for the scholars' immature, tender eyes.

To protect the scholars from excess of light, all the windows should have shutters with rolling slats; they throw the light up or down at option, and admit fresh air in summer.

The seats in school rooms should be so constructed to admit of raising or lowering according to the requirements of each scholar, for every child should be able to rest its feet on the floor.

Bodily proportioned desks and seats may give a tendency to near sight—myopia—by forcing the children to lean forward too far in writing or reading, or by bringing the page too near the face.

The correct position for a book is a square or less upright one, especially for a near-sighted child; it should have an angle of about sixty degrees from the horizontal.

(Continued on Page 2.)

The first page of the SCHOOL BOARD JOURNAL reflected strongly the editor's newspaper background.

of honor and efficiency, his publication would become a wholesome influence in the field of school administration. In fact, with a reasonably widened reading constituency, it would become a good influence in the educational life of the nation.

These aims and aspirations have in a measure been realized. When the labors of a half century have been weighed and measured, it will develop that they constitute a modest contribution to the educational progress of the country. They have helped to promote greater efficiency and higher standards in school administrative effort.

### Some Policies

From the very first issue the Journal has sought to reflect the best thought with respect to the organization of school boards and to argue for the freedom of the schools from the domination of city councils, and in general, from the control of any political or partisan interests. It did not take many years of experience to form the very definite conclusion based upon observation of the conditions in many cities, that the large school board is a positive detriment to the efficiency of the lay and professional control of



the school. A very positive stand was taken for many years against large school boards, although this had a direct effect of reducing the total possible number of subscribers, and, in a measure, actually reducing the patronage of the Journal.

For increasing the efficiency of individual school-board members, much attention and space has been given to arguing for the reading of good literature, for the intensive study of school problems on the part of individual school-board members, for national, state, and county school-board conventions. In all this work, the proper perspective was kept, in that it was advocated that school-board members take up these problems from the layman's point of view, as citizens and parents.

In seeking to assist in the better understanding of the relations of school-board members to the professional heads of the schools, it was very early the policy of the Journal to advocate for the superintendent, the initiative in all strictly educational matters as well as in all matters of business which might have a direct influence upon the work of the classroom. At the same time, consistent propaganda was made for the right of the school-board member to review and to accept or reject the recommendations of the superintendent insofar as the judgment of the members of the board reflected local sentiment and community desires. It has not appeared that this position was wrong, even though it has been argued that the superintendent should be free in all matters.

### The Physical Necessities Promoted

Among the chief functions of school boards, as it has appeared to the Editor, has been their duty of providing the physical necessities of the school in the shape of buildings which are safe and sanitary and fully adequate for the educational work which is to be carried on in them. With this in mind, a department devoted to school architecture has been prominent in every issue of the Journal. In this department, by means of illustrations and text, consistent pleas have been made for better design, for fireproofing, for the decoration of buildings and grounds, for better heating and air conditioning, for adequate natural and artificial lighting, for better sanitation, for adequate communication, etc. In arguing for the better equipment of school buildings, the problem of prison-made furniture was taken up in the late nineties. The necessity of adjustable furniture was argued for many years. In general, a consistent plea has been made for the best in equipment, apparatus, and supplies.

The health movement in the schools has been particularly emphasized in the Journal. The danger of crayon adulterations; the criminality of the common drinking cup; the elimination of dust by hygienic oil brushes, and later by stationary vacuum-cleaning system, were strongly emphasized previous to the world war. Not a little attention has been paid to the desirability of sanitary drinking fountains.

In promoting the idea of better teaching materials, the Journal

has constantly sought for the adoption of better textbooks and has consistently opposed unwise state uniformity of textbooks and state publication of books.

### School Business Management

It has been the conviction of the Editor that much of the efficiency of school systems depends upon good business methods, as well as upon high educational ideals and correct pedagogical methods. It has been constantly a policy to promote the better conduct of school-board business, to stimulate interest in better buying methods, to argue the necessity of scientific budgets, of better school records, of accounting based upon the best corporation and public accounting methods.

Among the many minor problems in school affairs which the Journal has touched upon, may be mentioned school exhibitions in state and international expositions, the elimination of high-school fraternities, the promotion of modern graduation exercises, interest in the National Education Association, and in the Department of Superintendence, now known as the American Association of School Administrators, and the various state educational bodies. The SCHOOL BOARD JOURNAL did much to popularize attendance at the annual meetings of the American Association of School Administrators. It urged upon boards of education to send their superintendents to these great gatherings.

It has been a constant aim to bring closer together in the spirit of cooperation, the teachers, superintendents, and school-board members, in the firm conviction that the ultimate ends of the school can be best achieved when there is democratic cooperation and complete harmony. It has been felt that whatever might promote the well-being and the contentment of the teaching force and of the nonteaching personnel would directly improve the quality of the school's product. For this reason the Journal has constantly advocated better salaries for teachers, pensions, permanent tenure of office, and participation of the teachers in the administration of the school systems.

And what, in the last analysis, does this all mean? Does it mean better buildings, higher-priced teachers, and better equipment for the sake of buildings, teachers, and equipment? Yes. But it also means a greater service to the cause of popular education. It means a tremendous impulse to the well-being of that one object for whom school boards, schoolhouses, teachers, books, and supplies exist — the pupil. It involves the future of the boy and girl of today — the man and woman of tomorrow — the future citizenship of the great Republic.

In approaching its fiftieth milestone, the SCHOOL BOARD JOURNAL not only points with a pardonable pride to its humble beginning, to the services it has sought to render to the cause of popular education, and to its present prestige and power, but it also pledges itself to renewed energy and increased service in the mission it has chosen for itself.





# Fifty Years in School-Building Design and Construction

H. W. Schmidt<sup>1</sup>

Fifty years of school-building planning and construction! What a topic to discuss and what vistas open to the reader, to those who know and to those whose memories carried them back to their early school days. With one side toasted, the other frigid and with cold feet it certainly required a "warm heart" and a lot of gumption on the part of the rural-school pupil to have enough vitality left to keep the brain cell functioning. And the more fortunate "scholar" of the urban area, if he might be so considered, did not have much more in the way of comfort or environment fifty years ago than did his brother of the rural district. He also had "seasons" of cold and heat and drafts to contend with and likewise was subject to poor lighting, both natural and artificial (the latter virtually absent in many, many cases), in the schoolroom. This was also the heyday of the "dry toilets" at that time hailed as "one of the outstanding sanitary features of the up-to-date school-house," as one circular described this iniquitous scheme.

And constructions were quite in keeping with our then circumscribed notion of what constituted first-class construction. Brick walls enclosing wood construction were the rule and made for a roaring furnace if fire ensued, a too frequent occurrence, and so often accompanied by a large loss of life. Concrete as now so universally used was not yet in common use, to say nothing of the thousands of modern materials and devices used in present-day school buildings.

The picture is not overdrawn as anyone may see for himself, even at the present day, when one may only go across the street or road to enter a school building

of the vintage from 1880 to 1890. True, there have been modernizations and remodelings galore, but the scars of the first major operation are still extant and cannot well be eliminated; these monuments of early ambition are still with us and probably will be for years to come. You know it is worse than chiseling out an impacted wisdom tooth for school authorities to discard an old, obsolete, and inefficient school plant unless it is really a menace to life, and so we still have them to look at and marvel how we ever came to build them. Oh well, time fugits!

## Of Planning and Building

In the earlier days, we are, of course, speaking of the years 1880-1900, the school administrator knew little of building arrangement and less of construction features; he took things as they were given to him by the designer, as a rule. The writer himself, more than once, sat in on a "conference" between school officials and the architects of a then considered very large school plant, and it is remembered how docile and apologetic all the school people were when some adverse comments were made on the general planning and arrangement of the building. The architects dominated the whole situation and their dicta were final though changes for the better were suggested and could have been made. No one pushed his ideas for the reason that he was not too sure of his ground and the architects "knew better," which, of course, was not true at all, in the larger sense.

The rural and smaller buildings were especially sinned against as may be seen even today. The cooperative idea, in this respect, had not been firmly rooted at that time and so the designing and layout of

such school buildings were left to the designer who, at the time, did not know a whole lot about school buildings himself, as he had little or no guidance from the very people who were to use these buildings. The term *functional planning* was not yet a part of our working vocabulary and, in an aside, is not even now used and applied to the extent it might be.

## What, No Surveys?

School-building surveys and long-range planning were not thought of and why should they? If the First Ward had a school then, of course, the Fifth and the Seventh wards had to have one too as ward lines, both politically and otherwise, were sacred precincts not to be touched, trespassed upon, or demolished by a mere schoolmaster. And so we have, or may one say had, a community plastered with a large number of small schools, inefficient, inadequate for the work in hand and poorly planned (usually after a common pattern or stock design); but they satisfied the politically minded officials even if these buildings did not fit into a unified educational system, the forerunners of which had already topped the barrier ridge separating the old from the new viewpoint.

Regulations looking toward good construction, proper sanitation and safety were virtually unknown and one "just designed and built" according to his own notion.

## The Reasons for Changes

What a change to the present! Before commenting specifically on this feature, let us look for a moment at the reasons underlying it. In the first place school administrators became cognizant of the fact that the customary arrangement of their old school buildings no longer met the needs of



Fig. 1. An eight-room elementary school erected about 1892.



Fig. 2. A characteristic frame building of the nineties.

<sup>1</sup>Supervisor of School-Building Service, Department of Public Instruction, Madison, Wis.

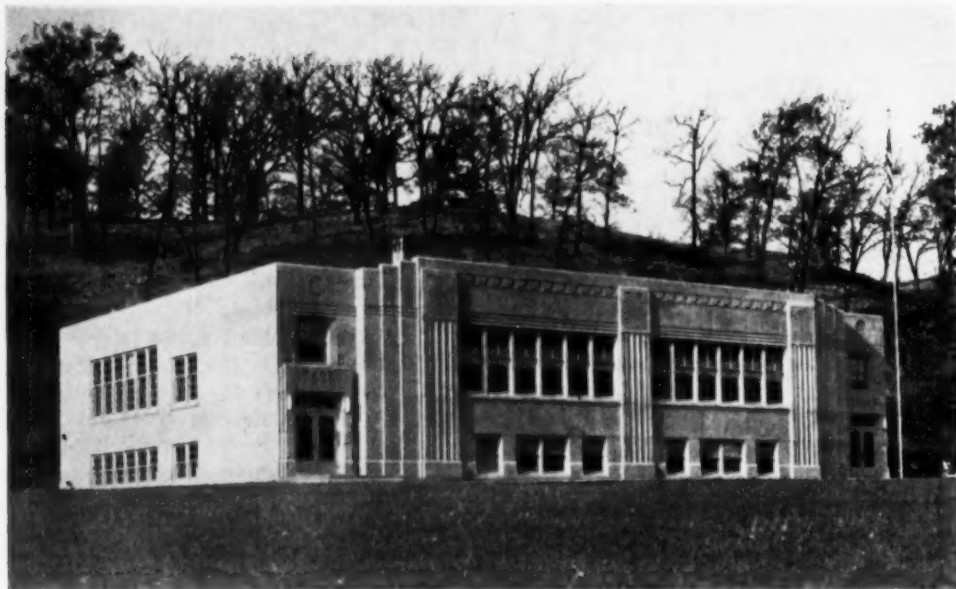


Fig. 3. A rural elementary school erected in 1939. The construction is concrete and steel, and fireproof.

their work and an expanding and modernized curriculum, nor did they readily permit changes—they were fixed, inflexible. Administrators were clamoring for light on many moot questions arising out of this situation, and the colleges and universities met this need in terms of courses fitting the school superintendent to intelligently meet and discuss his problems in these directions. The various state departments of education began to give service in this specific direction and helped to leaven the lump of "raw dough."

The contemporaneous literature became a clearinghouse for ideas, and out of the chaos of varying opinions and notions there grew a large number of "standards" or ideas which were generally accepted and which have served the schools in excellent stead. Not that the writer would have these standards fixed but rather that they be used as guide lines which may be shifted as our knowledge of things educational and material increases and expands.

Again, the changes in our economic life and our social attitudes made for a large increase in building costs, among other

things, and of late years these costs have assumed such proportions that they, too, frequently act as deterrents to much needed expansions and modernizations. The school officials must therefore watch their p's and q's and perforce must also be conversant with the large number of social and economic factors which influence costs—and happy to say, many of them are.

The architects, as a rule, but by no means all, have of late recognized that school-building planning, and we are speaking of planning, arrangement, and space disposition, calls for a type of specialized knowledge not ordinarily used in other kinds of structures; the designer is therefore a successful school-building architect in the measure that he has this knowledge and applies it to specific cases. Thus there has developed a group of school-building specialists who may and do serve the school officials in an excellent manner—they do much of the "spade" work and in cooperation with the administrator usually produce a really good school building. Thus the cooperation, so lacking for want of knowledge and appreciation of the prob-

lems of fifty years ago, has become an accomplished fact—and it has produced its results in terms of fine school plants which are a joy alike to the educationalists, the designer and to the citizenry.

And lest we forget, the modern school building no longer consists of some classrooms and maybe an office. The once so-called auxiliary rooms and spaces now make up a very appreciable part of the building. Classrooms are provided with large "work spaces" and rooms 23 by 40 ft., or even larger are becoming quite common. Medical inspection suites, dental clinic rooms, and large office suites are the rule, and gymnasiums and auditoriums as well as commodious and well-arranged libraries are taken as a matter of course, even in small school buildings. Students now have available conference rooms and individual music practice rooms, while a school which does not provide adequate space for music instruction is considered out of date. The small theater or rather auditorium is an integral part of the work in speech and expression, and the modern rural school of even one or two rooms so far outclasses the old that there can be no comparison.

These are the inroads made by the demands of the modern up-to-date curriculum in spite of those who are still committed to the three R's, and even they, in introspection, will admit the need for the above—we just can't do without these "conveniences."

Another factor conducive to better school structures is the fact that state and regulatory bodies have developed regulations looking toward good structures which are safe and sanitary, have fairly well balanced space relations, and take into account the health and well-being of its occupants—a far cry from the year 1890.

#### Plans of the Past

Before leaving this particular subject it may be of interest to just glance at a few examples of the school buildings of "then and now."

I have before me the plan of a grade and high school erected in 1900 and having



Fig. 4. When it was erected this building was considered a model rural school.

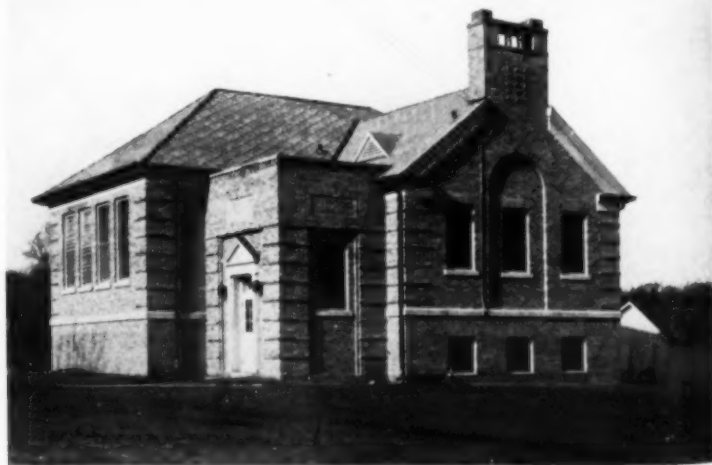


Fig. 5. Fire safe rural school erected in 1939.





Fig. 6. A complete high-school plant (the Menasha, Wisconsin, High School).

eight classrooms on each floor. These rooms are 25 by 30 ft., and served by a hall 25 by 90 ft., in the center of the building. On the second floor are a study hall and four recitation rooms of the same size as those on the first floor, a laboratory 16 by 20 ft., and two teachers' rooms of the same size. There is no connecting corridor — very likely they thought they had enough on the first floor. This means that 17 per cent of the first-floor area was devoted to corridor space!

Another plan of 1898 has 16 classrooms, eight on each floor; the two corridors, there are two in this building, are each 20 by 100 ft., and as the building is 65 by 138 ft., it appears as if over 22 per cent of floor space is in terms of hall space. Several other plans show this similarity — evidently they believed in "large, wide, open spaces," even if these were indoors. Ho, hum!

As to general features, well, let us see: a four-room, "much complimented brick school has its windows all on one side — and a 12-foot gymnasium occupies the entire basement. The boys' and girls' toilets are placed on the second floor over the hallway. This absolutely precludes any possibility of obnoxious odors permeating the building —." Well, well, how come? "The excellent ventilation is secured by heat pipes in the vent stacks as this successfully draws the foul air from the room." One sees they already had foul air to deal with, and how!

The description of a "very large school" calls attention to the marvelous fact that there are two entrances to this building, "which makes it possible to empty the classrooms and the building without any confusion" (page the Building Exits Code Commission, of the N.F.P.A.). "The cloak-rooms extend into the hall and are open above thus allowing the dampness to

escape into the hallway. — This school of Tudor-Gothic design lends itself admirably to such a purpose, while at the same time giving the building a decidedly *collegiate appearance*" — There must have been considerable virtue in the latter.

We also find that in 1895 "consensus of opinion favors a large study hall which will accommodate the full attendance of the school at one time," and, "it is necessary that every laboratory be attached to a lecture room"; it is also stated that to combat "the humdrum work of the day which shrinks the lungs and the chest, it is therefore important for every teacher to give daily breathing exercises of the deep breath variety; a gymnasium is not needed." (Do you remember this: "On your toes, take in, one, two, three; exhale slowly, one — two — three," with windows wide open — also the mouth and nose. Those were the days of real sport.)

Describing another building we find — "the special feature of an office for the principal with a board room and even a separate room for a stenographer, while it is contemplated that the future may even

require a health suite; i.e., a room or rooms where a doctor may examine pupils and thus safeguard the health of the whole school." (That chap had something there, as we would say today.)

#### Some of the Older Buildings

To be still more objective may the reader take a glance at Figure 1. This is an eight-room building erected about 1892. This school up to three years ago, was still heated (will not mention ventilated) by stoves as may be seen by the photograph. There are four chimneys; one chimney hides its head in shame, we hope, on the other side of the building. It has been somewhat modernized since. Figure 2 is another characteristic building of fifty years ago erected in frame and is or was a veritable fire trap. It had eight 1½ inch through bolts or rods to prevent collapse by spreading. The chute is useful even if not ornamental. It has since been replaced by a modern fireproof structure. Compare these two buildings with Figure 3. Comments seem unnecessary.

Figure 4 was at one time "a modern school with all conveniences such as cloak-rooms, dry toilets, and a furnace, which also ventilates." Then we have Figure 5, a building erected in 1939 whose "conveniences" consist of library, cloakrooms, water-flushing toilets, air-conditioning system of heating and ventilating, large playroom, lunchroom, kitchen, etc., as well as a detached garage for the teacher. Figure 6 shows what a complete high-school plant looks like today.

Classrooms have also advanced. Figure 7 shows a third-floor recitation room in a large building over fifty years old. Contrast this with Figure 8 which shows an up-to-date rural classroom with library off the rear of the room. How is that for contrast?

The old type of gravity furnace systems



Fig. 7. A third-floor recitation room in a fifty-year-old high-school building.



Fig. 8. A rural classroom with library and work-alcove at the rear.

are rapidly being replaced with air-conditioning systems and steam jobs using unit ventilation. Figure 9 shows a single-room building utilizing a heating system, similar to the one shown, for nearly forty years, while Figure 10 depicts a modern plant with oil burner and unit ventilation in a two-room school. Yes, we are progressing.

### The Mechanical Features

Sanitation has also taken a very decided forward step. Outdoor privies have been largely replaced by indoor conveniences, and even when they must be used the more modern type as developed by the WPA is a big improvement. The so-called dry toilets and even the chemical type have given way to water flushing, and the "septic" toilets and local municipal sewage-disposal systems serving schools are quite common now.

The common drinking cup and even the individual cups are no longer in evidence in any school, let us hope, and the bubbler with its sanitary angle stream is the rule. Hand-washing facilities and the modern shower with its automatic temperature control are now found everywhere.

Artificial lighting of the nineties seems to have been a side issue and where used the old carbon-filament lamps were the only ones available. Before me are two specifications of school buildings of that period; one has no provisions for artificial lighting at all and the other calls for, "— four ceiling outlets in each classroom with proper supports for the lamps which are to be of approximately 50 candle power; all wires are to be protected by circular looms where they might contact wood. All rosettes are to be furnished with fuse wires,

well protected." Now we call for about 15 times as much light, with modern fixtures of the indirect-type, tungsten filaments or even the new fluorescent lamps, and automatic control.

Need one mention modern seating, the attention paid to decoration and color schemes, and the thousand and one conveniences at hand to show our advancement. Time and space are too short to detail such features of equipment and general school facilities, but even in the past ten years much progress along these lines must be evident even to the casual reader.

### Materials of Construction

Construction materials have kept pace with the requirements of the times and the newer planning has taken full advantage of them. Design has moved forward and we are no longer confronted with steep hipped roofs, wide cornices, impossible cupolas and bell towers, and all the peculiarities of the post-Victorian era. Even those designers who used the same exterior features time and again (one could spot such characteristics miles away and thus call the designer by name) have changed their attitude and have introduced definite variants into their structures, partly induced by the supply of modern materials and a more careful study and analysis of them. The various testing laboratories, the association dealing with standards, and the research by individuals and commercial interests, all have contributed very largely to the whole problem of construction materials, their disposition and a more effective use of them.

The common type of materials in the eighties and nineties were solid brick

masonry walls. Some tile was being used but it was of an inferior type which was not looked upon with great favor. The interior construction was largely wood; fire-proof stairs, corridors, and interior curtain walls were just coming into use. Much of the stairway design was in cast iron and steel with large, open wells, thus virtually making chimneys of the most vulnerable and hazardous portion of the school.

Roof covering was either slate or more commonly wood shingles, and literally tens of thousands of feet of timber were used for roof construction in a single school building. Again quoting from a specification, "Foundation to be of solid rubble construction using a good mortar. The foundation trench to be two feet deep and the same knapped full of stone upon which the wall is to be built." (That word knapped caught the writer napping, to pun a little. It virtually means "broken stone," according to the dictionary.) But another item in a specification of 1889 called for concrete for footings "—to be of consistency 1 to 3 to 5 and put down very soft."

Floors were universally of wood, either oak or maple; partitions were of wood and where furring was used back plastering was frequently called for. Plastering was little different from today's except that hair was still in use as a binder. Terrazzo was becoming a small factor in the large city schools but was not in general use as yet; tiling was also looming up large on the construction horizon. Safety treads on stairs were coming in. In one instance, they were to consist of "metal or rubber pads or other material which will provide safe footing and prevent slippage; as a further safeguard 3-inch solid oak railings should be placed as this makes a neat and pleasing finish here." They must have accommodated some heavy weights.

What a contrast with the construction of a modern school to say nothing of the materials now available and their use in erecting a school which is safe, sanitary, meets all educational needs, is fireproof and withal is generally pleasing in design and completely functional.

### Scientific Progress

Heating and ventilating have become almost an art because our scientific investigations and mechanical improvements and inventions have given the engineer data by means of which he can predetermine any result he desires to produce. He now has at his disposal efficient blowers taking the place of eight- and ten-foot disk fans; he has temperature and humidity regulation at his finger tips. Unit ventilators have been giving him almost the ultimate in flexibility, and he can now reduce high summer temperatures indoors to comfortable conditions by utilizing the modern air-cooling and conditioning devices. Heating and power plants have almost doubled their efficiency in fifty years, not forgetting that the stoker and the oil burner,





Fig. 9. An overcrowded and ill-lighted rural classroom.

and electric service and its ramifications are now such that they would not have been recognized even thirty years ago much less have been thought about in 1890.

The public-address systems now in such vogue, nay, elevated to a necessity, and the radio are but two examples of progress; the followers of the common tungsten filament lamp are numerous, such as the neon lamp and others. Maybe the fluorescent lamp will be the coming illuminant. Who knows what the future has in store?

Among materials of construction we now find much improvement in the use of cement and concrete, and due to a better working knowledge, we are now able to use these materials in nonolithic and pleasing architectural forms. The cinder masonry block has had a large influence in construction design, and the commercial production of aluminum and stainless steel has given the designer some excellent and lasting materials to use and in which to work.

Floors now range from precast slabs, pan and beam construction to the steel joists and lumber, while the choice of floor coverings runs through a wide range, from matched lumber, built-up blocks, asphalt tile, linoleums, and cork to rubber tile and kindred materials.

Much of the older stone trim is being replaced by excellent precast stone, and all types of terrazzo and ceramic tiles have so improved in manufacture and style and color that no designer need fear that he may not find on the market what he wants to use.

Who had any idea fifty years ago that acoustical treatment of school areas would appear in the future and as a matter of course or that such sound insulating materials would be as readily obtainable as brick and sand? Yes, we tried heat insulation as far back as 1880, but the results was almost negative and the matter had to await investigation and the development of proper materials, such as "slag wool," "rock wool," "exploded mica," "fiber" boards too numerous to mention and to the uninitiated the unbelievably effective aluminum foil and other "shedders of radiant heat." Just another milestone of progress.

Though not strictly new materials, the

extended and new use of the old has given us first the "lamella" type of large, "unsupported" roof areas, followed by the bent steel arch and now the laid-up wood arch, very distinct contributions to an engineering problem which necessitated up to this time the use of standard trusses of the Howe and Fink type, the Webb, the bow-string, lattice or other types. No matter where you look, everything in the material and construction line has either been improved, changed, or replaced by newer and better ideas and substances. Even lumber is now better graded, manufactured, and cut to exact lengths and specifications. Whenever the designer or the engineer now meets a new problem there is always someone or some thing ready to serve him—and it will always be so. All sciences have become the handmaidens of the constructor.

But why continue? We are living in an era of advancement, of new ideas, of enthusiasm, of knowledge, in a tremendously dynamic world, and the future no doubt will have a lot of new things for us. May those who are to use them grow in the same measure, for we are still dependent upon the "man behind," the minute man of foresight and vision!

#### A Philosophy

In conclusion, may the writer be pardoned by transgressing the general tone of this article and permit himself a few philosophical thoughts. It has always been a real marvel to him how all these and in fact all improvements and inventions have come about and *how most of us take such matters for granted*. Personally the writer



Fig. 10. An oil-burning, low-pressure steam boiler which provides heat for a two-room country school in 1940.

has never gotten over the marvel of it all, and he still gets a real mental (and physical) thrill when listening to a rebroadcast from London or Paris while others complain that, "It was not much, it isn't clear—poor stuff." How can one help but appreciate the time, the effort, the enthusiasm, the hard work, yes, and the heartbreaking failures, which went into one of these newer ideas before they took objective shape; yet nine tenths of us take all things as a matter of course. But we, in the know, we know better and we hail those who slave so that the other ninety-nine may have at their disposal the things which they need—"for they builded better than they knew." May the next fifty years be as fruitful as those of yore—and it will so come to pass. *Je vous salute, mes amis professionals.*

## Superintendents and School Boards<sup>\*</sup>

In reporting the work of teachers to the board the superintendent encounters many unpleasant things. For instance, if he has labored vainly to have some teachers overcome the habit of indolence, and another of untidiness, and another of being ratty, and there is no improvement, what can he do but report them? If he is responsible for the progress of the schools that is his duty.

Superintendents are often charged with favoritism, sometimes justly and sometimes not. The man who is sufficient for this place can be just to all. He who uses his office to serve his friends and displaces old teachers on slight pretexts to give them places is a politician, and unworthy the trust reposed in him. And right here let us speak of how much trust is reposed in him.

Unless the board receives his judgment of the teachers and their work, he is a mere figurehead. If they accept his estimate of them, he really dictates who shall be the teachers, and so far as he is impartial

this is as it should be. His immediate relations to the schools enable him to know their needs better than the board can possibly do, and when he has proved his competency for the position he should be authorized to legislate and execute up to his highest standard of excellence. The average patronage of the schools will be apt to measure him very correctly.

Briefly then, the superintendent should be a man of rare attainments, morally, intellectually, and sociably; in one word, a full-orbed man. Incapable of prejudice, pettiness, or arbitrariness. He should arrange and outline work, suggest methods, and *insist* on results. He should be true to the board, and true to the teachers no matter what be the outcome.

Every progressive educator will meet just enough resistance and well-bred persecution to fire his zeal and test his motives. To be able to conciliate and capture these very forces for his service requires tact, diplomacy, and ability.

These are compatible with true manhood and must characterize the successful superintendent.

<sup>\*</sup>Editorial, AMERICAN SCHOOL BOARD JOURNAL, February, 1893, p. 8.

# Vacuum Cleaning in the Schools

R. A. Brackett<sup>1</sup>

A comparison of cleaning methods between those in general use fifty years ago and the modern cleaning methods in our modern schools is most interesting. Fifty years ago the steady use of the corn broom was about the best that the classrooms received for cleaning. Dusting was not frequently considered a necessity. In fact, the very construction of the building and the heating systems would not permit the high standards of cleanliness of today.

Wood- or coal-burning stoves frequently located in the classrooms were dust breeders. Unpaved highways and paths increased the amount of dirt tracked in by the children. Wooden floors with wide cracks between the boards gave fine collecting places for this dirt and dust, ready to be stirred up and spread throughout the room at every movement of the class. Compare these conditions with those of today with hardwood or linoleum-covered floors. Compare the condition of the shoes when they arrive at the school. Today the children either ride to school in a bus or automobile or walk over fine, paved sidewalks.

The modern school is completely piped for a central vacuum-cleaning system, and all dirt and litter are picked up and conveyed to the basement. Inlet valves are located in every classroom, also in the corridors, gymnasiums, cafeterias, and auditoriums so that every part of the building can be reached conveniently.

## Introduction of Vacuum-Cleaning Systems

Air-conditioning and ventilating filters are easily kept clean with this cleaning system whereas in the olden days such equipment was never heard of. About 1900 the first central vacuum-cleaning systems were installed. They were used mostly for carpet cleaning and installed in hotels and the larger residences where better standards of cleanliness were required than would be possible with any other method.

Soon, however, the advantages of this method of cleaning even in its crude and imperfect state became obvious and other uses came into consideration. Chiefly among these was bare-floor cleaning which included office buildings and, most important of all, schools. Nowhere is cleaning so essential as in the buildings where young people sit for hours every day, frequently walking around and stirring up any dirt that is there. Breathing in this germ-laden air was injurious to their health. It has been shown that the number of absentees from the old, poorly cleaned schools was considerably greater than from the modern, well-cleaned and properly maintained buildings.

These items are being given careful con-

sideration today in many ways, but the principle of vacuum cleaning remains approximately the same today as it did when it was first adapted for school use; namely, the vacuum producer driven by an electric motor is located in the basement. The size of this motor depends upon the number of classrooms in the building and the number of janitors or cleaning women that will be using the vacuum-cleaner tools at one time.

## Distribution of Sweeper Capacity

This is usually figured on the basis of  $2\frac{1}{2}$  h.p. per sweeper and one sweeper capacity for each 12 classrooms. That is, a school building with 24 classrooms and in addition the usual number of corridors, auditorium, gymnasium, and other rooms would require two janitors and a 5-h.p. vacuum cleaner.

This figure of 12 classrooms per sweeper is based on the fact that a janitor can clean a classroom in 10 minutes or a total of 6 per hour. As the usual cleaning time allotted is 2 hours, this means he can cover 12 rooms after school is dismissed. The corridors, auditorium, etc., can be cleaned while classes are in session so quiet is the vacuum cleaner of this type.

In addition to the vacuum producer, the separator in which the dirt is collected is also located in the basement. These two units together with the piping make up the principal parts of the installed system. Flexible hose is connected to the inlet valves and the well-laid-out system requires not over 50 feet. Lightweight tools with swivel connections permit the operator to get in and around the desks and chairs easily.

## Time Elements in Sweeping Service

The change from broom sweeping to vacuum cleaning was not made easily as many objections were raised. The older janitors did not like to handle the hose and felt the broom was easier. They had been doing this kind of work too long to be enthusiastic about something new that looked harder. Many different means were employed to convince them and the proven facts finally won them over.

For example the authorities in one school became satisfied that better cleaning could be accomplished. They tried vacuum but were opposed by the janitors. A test was made and a janitor cleaned a classroom with a broom, collecting 2 ounces of dirt in 9 minutes. The same room was then immediately cleaned by vacuum and the dirt collected was 13 ounces in 8 minutes. Six times the amount of dirt in one minute's less time.

Another series of tests in over one hundred schools showed the average time of cleaning a classroom with a floor brush was

8 minutes, 47 seconds. With vacuum the average time of cleaning the same size room was only 7 minutes, 26 seconds. Furthermore, it was found that only a few janitors did a satisfactory cleaning job with a broom. With vacuum the same janitors all averaged much higher standards of cleanliness. Proving that with this new cleaning tool even the poor janitor could not do a poor cleaning job. One authority reports the vacuum a great aid in reducing the incidence of insect pests.

## Old-Time Blackboard Cleaning

In the old days blackboard erasers were usually cleaned by clapping them together outside a window. Today they can be cleaned by vacuum in the classroom by the janitor while doing his regular cleaning. In some cases a basketful is collected and taken to the basement for cleaning. Many an ingenious device has been made by a janitor for attaching to this vacuum-cleaning system, making this dusty and disagreeable job a simple matter.

Chalk trays can be cleaned with the end of the hose which simplifies the dusting problem. All surfaces will collect dust some of which comes from the chalk, some from the grinding of cement floors under children's shoes. Some dust may blow into the building from the street through open windows, but mostly it is tracked in on the children's feet.

Library books receive their share of this dust. It took long hours to remove each book from the shelf, wipe it off, and put it back again. The modern method is to clean the books on the shelves with a specially designed vacuum tool that looks like a large toothbrush. This tool is inserted in the end of the vacuum hose and all the dirt is conveyed to the basement instead of being stirred up and scattered around the room.

In replacing the old wood stoves came the return tubular boilers burning coal or oil. But 1/16-in. of soot in these boiler tubes reduces the efficiency 20 per cent. Cleaning these tubes by hand is a hard job, but the vacuum cleaner has also solved this problem. With a specially designed tool that fits into the end of the tube, high-velocity air is drawn through the entire length. This removes the soot from the inside of each tube almost instantly and deposits it in a separator installed for this purpose. A barrel can be set under this separator and the soot dumped into it for final disposal.

Modern schools are equipped with gymnasiums and these wide expanses of floor can be easily kept clean by the use of the vacuum. A janitor cleaning these open areas can cover 6,000 sq. ft. per hour and actually get all the dirt. The gymnasium mats, unless thoroughly cleaned, send up

<sup>1</sup>Spencer Turbine Company, Hartford, Conn.

(Concluded on page 125)



# School Heating and Ventilating During the Past Fifty Years

Herman W. Nelson.<sup>1</sup>

Perhaps there has been more progress during the past fifty years in heating and ventilating than in any other one field in school construction. In fact, it was only fifty or sixty years ago that any thought at all was given to the need for classroom ventilation. Prior to that, the principal concern of both educators and heating engineers had been to keep classrooms sufficiently warm.

When mechanical systems for combining heating and ventilating were first introduced, overheated, poorly ventilated classrooms were universal throughout the country. Today, after and as a result of years of scientific study both of systems and applications, it is possible for school children to enjoy healthful air conditions in their classrooms.

When the problem of heating schools had been reasonably well solved in the 1880's, attention was brought to the necessity for some method of ventilating crowded rooms and preventing unhealthy, discomforting conditions. At that time, practically all theories on the causes of discomfort and poor ventilation were based upon the decrease of oxygen content, increase of carbon-dioxide content, and addition of products of organic decomposition. This was widely known as the Toxic Theory.

Dating from experiments of the French scientist, Lavoisier, in 1777, it was believed that the air in occupied rooms was contaminated through breathing by the occupants. Lavoisier found that respiration is a phase of combustion and that this results in a chemical phenomenon in which oxygen unites with carbon to form carbon dioxide.

## Early Experiments in Ventilation

The really important result of this union — generation of heat — was overlooked by early students of ventilation who focused their attention on the chemical result and inferred that bad atmospheric conditions in rooms was directly attributable to carbon dioxide. Accordingly, the art of ventilation developed along this line and it was the general practice until the 1920's to remove air abnormally charged with carbon dioxide and replace it with outdoor air. In fact, practically all school ventilating systems until a little more than 20 years ago were designed and constructed to perform this function.

The first serious attempt at so-called "artificial" ventilation, combined with heating, resulted in a "gravity hot air" furnace system, combined with a dry closet system. Usually, large, horizontal, brick-set, cast-iron furnaces were arranged in batteries of

two in the basement with a so-called "fresh-air" room adjoining. Outdoor air, admitted through basement windows passed through ducts to the "fresh-air" rooms, from which it flowed into the bottom of the furnace casings. There it was heated and passed through vertical, hot-air flues into the classroom. Theoretically, a uniform temperature in the rooms served could be maintained by regulated mixing dampers. To complete the circulation system, air was drawn from the classroom through baseboard vents and through conduits to foul air rooms in the basement, thence through the dry closet vaults and vent stack.

This early "gravity" furnace system proved satisfactory in smaller buildings but was not at all adequate for large city schools. In addition to the fire hazard — at a time when fireproof construction was coming into the limelight — this system occupied a large amount of space with its batteries of small furnaces scattered throughout the basement.

## Hot Air Versus Steam

Some controversy existed for a considerable period between the advocates of "hot air" and "steam" distributing systems, the latter employing large banks of indirect radiation instead of furnaces. The steam systems, although costing more to install, won out because of their many advantages. They afforded better control, saved space and work, reduced fire hazard, and prevented danger from gas leakage, in addition to providing greater flexibility.

The first steam "gravity" systems provided for a vent in the outdoor wall in back of the radiator. The radiator heated the air in the room, thereby expanding it and causing outdoor air to be drawn in around the radiator. After the warm air was expanded, it became lighter and rose to the ceiling. As it cooled on passing through the room, it became heavier and was supposed to pass out of the room through a register located near the floor at the side of the room opposite to the radiator. This system, as did the "gravity" furnace system, depended upon the difference in weight between cold and warm air to cause circulation.

The basic fault with this system was that the movement of the air naturally varied with the difference in temperature of the outside and inside air. Consequently, there could be no adequate control. In the late spring months, when ventilation was most needed, there was not enough difference in air temperatures to provide any noticeable circulation. State and other departments who inspected and tested heating and ventilating systems agreed that the gravity

system of ventilating schoolrooms was unreliable.

Mechanically controlled ventilation was introduced near the turn of the century to meet the inadequacy of the "gravity" system. In mechanically controlled ventilation two systems were used from the very start. Fans or blowers were employed for either pulling the so-called "foul" air out of the rooms or pushing the so-called "fresh" air into the rooms, depending on the system used. For some time there was considerable disagreement as to the merits of removing "foul" air — the exhaust system, or in blowing in "fresh" air — the plenum system.

## Trend Toward Plenum System

The predominant trend in mechanical steam work was toward the plenum system, in which fresh air, taken from outside, was blown by fans around heating coils or furnaces into the rooms, creating a pressure in the classroom greater than the atmospheric pressure outside of the building. This pressure within pushed out the so-called "foul" air through registers or openings provided for that purpose.

The exact opposite principle was used for operation of the exhaust system. For this a fan, or possibly a heating element, was used for pulling or drawing the air out of the ventilated rooms — thereby creating a vacuum or low pressure condition within the rooms. Because of the higher outside atmospheric pressure, fresh air was naturally drawn into the building through flues or registers. This outdoor air was allowed to pass over the heating coils provided for the purpose.

The plenum system proved more practical and soon dominated schoolroom ventilation. The exhaust system found disfavor because it produced a low pressure in the room, thus resulting in draughts because of leakage of the cold outdoor air through cracks and apertures. It was also found that odors from other rooms or space infiltrated with this system. With low pressure within the rooms, thorough diffusion of air was impossible and neither heating nor ventilating results were satisfactory. For these reasons the exhaust system receives practically no recognition as an acceptable method for ventilating crowded rooms.

With the introduction of the mechanical "central fan and duct" plenum system, classroom ventilation moved a step ahead. This system employed mechanical and positive means for circulating air. In the earlier attempts with this system, no radiators were placed in the rooms, and fan and heating coils served both to heat and ventilate, resulting in this system being called "straight blast heating." There were, how-

<sup>1</sup>President, The Herman Nelson Corporation, Moline, Ill.

ever, many difficulties that could not be overcome in this system, in which air served as the heat conductor.

The greatest difficulty proved to be that there was no heat in those spots which the air did not reach. In addition, the long ducts and flues through which the air was carried from the fans to the rooms offered so much resistance and sometimes leakage, that the air was seldom, if ever, evenly distributed to all classrooms. Some of the rooms received more air than necessary and others half their requirements or less. For a while it was thought the system could be balanced with dampers. This was found impractical, because if the dampers were properly balanced on one day, they might be out of adjustment the next with changes in wind or weather conditions.

### The Open-Window Problem

With this system, it was also discovered that windows could not be opened in any one room without affecting the ventilation in others. If the windows were opened in one room, this relieved the pressure in that room, thus lowering the resistance to the flow of air from the heat register. When this occurred, so much warm air would flow into this room that some of the others in the building would receive no fresh air and the distribution was out of balance.

Exhaustive tests proved that the central fan system failed to diffuse the air properly in all sections of the room. In fact, the greater portions of many rooms never received the correct amount of air for ventilation, because it was impossible to discharge the air at a high velocity horizontally toward the occupants. An air velocity of 350 ft. per minute through the register was considered a maximum, if draughty conditions were not to result. Even though the fresh air register were placed 8 ft. above the floor, it was discovered that an outlet velocity exceeding 350 ft. per minute would cause draughts that could be easily felt by the occupants. When the velocity did not exceed 350 ft. per minute, it was impossible to diffuse the air through the rooms.

It was found that the fresh heated air, often colder and heavier than that already in the classroom, failed to mix readily with the room air when admitted to the classroom at low velocity. In many cases the air supplied for ventilation never reached the greater portion of the room. Authorities found that with the straight blast central system it was difficult to maintain the double-duct system, commonly used, in satisfactory operating condition. This was particularly so when the dampers in which the cold and heated air were mixed were difficult to reach. It has also been found, these authorities agree, that the chilling effect of outside walls, where there is no provision for heat, is objectionable.

As the recognized function of a ventilating system is to distribute the air to the occupants and not merely blow it into a room, this system had apparently failed in practice. It failed both in the matter of

distribution of air to all rooms and the diffusion of air in each room. For these reasons, the central fan and duct system has been largely replaced by unit ventilators and central fan split systems.

### Something About the Split System

With this latter system, direct radiation is added to all rooms in addition to the central fan system. It is called the "split" system, because, in a way, the heating and ventilating are split into two parts. Fresh air is drawn through a heating coil by the central fan and forced into all the classrooms at a common temperature of from 75 to 85 degrees. Thus, this air used for ventilation is "tempered." Because this "tempered" air is not warm enough in many localities to heat the classrooms adequately, direct radiation is added.

While there is some overlapping of duties, most of the heating is provided by the radiators and the ventilation by the "tempered" air. When this system is used, it has been found advisable to provide for easy adjustment of the temperature of the "tempered" air. In mild weather, the radiators are needed only part of the time because the "tempered" air is adequate to provide sufficient warmth. When it is extremely cold outside, the temperature of this air should be as high as 85 to 90 degrees to prevent draughts in the classroom. Likewise, in mild weather, the temperature of the "tempered" air should be from 72 to 75 degrees, or lower, to prevent overheating as much as possible. A thermostat in the room determines the length of time during which direct radiation is used at any given period. Generally, direct radiation is used for maintaining heat in the classroom when the fan system is shut down after school hours.

Educators and engineers agree that the "central fan split" system is more desirable than the older "central fan blast" system. There are many reasons for this, chief of which are that there is better temperature control, the air is not boosted to so high a temperature and outside walls are warmer. This system has been installed in many schools with generally satisfactory results.

### New Difficulties Overcome

After 30 or 40 years of experimentation in the heating and ventilating of schools, a new difficulty presented itself. School classrooms were universally overheated and temperatures as high as 80 to 85 degrees were common during winter weather. This aroused considerable criticism, particularly among hygienists and health authorities, who, fully aware of the evil effects of overheated rooms, in many instances condemned mechanical ventilation and began to advocate return to "open-window" ventilation. Some of these men pointed to the failures in mechanical ventilation, citing specific cases. Their chief objection to all heating and ventilating systems was the tendency to overheat classrooms, because of their crowded condition. Practical en-

gineers admitted this contention, but said that overheating could not be prevented by "open-window" methods without sudden changes of temperature and dangerous draughts. While admitting the faults of "mechanically controlled" systems, they maintained that only these could be the ultimate answer.

During the time of this controversy, the unit-ventilator system appeared on the market. With this system the unit ventilator, together with the necessary auxiliary direct radiation, was placed in each classroom. The unit ventilator consisted of a radiator, a motor, fans and one or more dampers, all enclosed in a steel cabinet. It drew a constant supply of air from out of doors, tempering the air as needed, before introducing it into the room.

The temperature of the air introduced into the room was controlled either manually or automatically by throttling the steam supply to the radiator or in bypassing portions of the air around the radiator with a damper. The unit system of ventilation permitted each room to be heated and ventilated individually. The system was not thrown out of balance by changes in weather conditions, opening of windows, etc. All flues and ducts were eliminated. Proper diffusion of air within the room was greatly improved by discharging the air at a high velocity from the unit ventilator toward the ceiling, where it was thoroughly mixed with the room air before reaching the occupied zone.

### The First Unit Ventilator

The first unit ventilator was a crude affair and the unit system did not begin to find acceptance from educators and heating engineers until nearly 1920. By this time, the principal shortcomings of the earlier units had been remedied. Newly designed radiators, only one quarter the size and one fifth the weight of those used in the first unit, made it possible to produce a unit which occupied much less space in a classroom. The first units were equipped with direct-current motors because fractional horsepower alternating-current motors, quiet enough for classroom use, had not yet been developed. Exhaustive research and engineering skill finally produced an alternating-current motor as simple and quiet and more efficient than the heretofore used direct-current type.

General acceptance of a thermal theory of ventilation — in which it is recognized that temperature, humidity, and air motion are the most important factors in ventilation rather than the chemical characteristics of air — made possible another advanced step in school classroom heating and ventilating. As previously stated, the earlier unit ventilators introduced a continuous supply and large quantity of outdoor air which had to be tempered before being introduced into the classroom. The latest unit ventilators admit outdoor air only when and as required to maintain the proper temperature and prevent overheating.

(Concluded on page 125)



# Some Developments in City School Administration During the Past Fifty Years

W. S. Deffenbaugh, Ph.D.<sup>1</sup>

Interest in school administration has developed largely during the past fifty years. In the Report of the U. S. Commissioner of Education for 1892-93 the subject does not appear in a classified list of 41 different topics upon which papers had been read from 1870 to 1893 at the meetings of the National Education Association. A few subjects discussed, however, could have been listed under "Administration." Prior to 1890 or even to 1900 there were no textbooks treating of school administration as such, and the few colleges and universities that were offering courses in education offered practically nothing in the field of administration. After books and journals devoted largely to school administration appeared and after colleges introduced courses on the subject, school officials and others began seriously to question the administrative practices that were in vogue. As a result of such questionings reforms in the methods of administering the city schools of the country were inaugurated. During the past half century the developments have been along so many different lines that only a few can be described in this brief article.

## Boards of Education Reduced in Size

During the past 50 years the reduction in the size of boards of education has been one of the accomplishments in the field of city school administration. In the 90's some cities had boards of education that today would be considered entirely too large for efficient control. Among outstanding examples of cities which had large boards are Philadelphia, Pittsburgh, New York, Cincinnati, New Orleans, Chicago, Boston, Baltimore, and Milwaukee. Philadelphia had a central board of 37 members, one chosen from each ward of the city by the judges of the Court of Common Pleas for the city and county of Philadelphia. In addition to the board for the whole city there was in each of the 37 wards a board of school directors of 13 members, making a total of 518 school-board members in that city.

Pittsburgh also had a central school board of 37 members and a board of school directors in each of the 37 wards. Each ward board was composed of 6 members, and each of these boards elected one person to serve as a member of the central board. The practice of having a central and ward boards continued in these two cities until 1911 when the Pennsylvania legislature abolished the ward boards and provided for a board of education of 15 members in school districts of the first class.

According to the Report of the U. S. Commissioner of Education for 1895-96, New York City at that time had a board of education of 21 members and 35 boards of school inspectors each consisting of 5 members. In St. Louis there were 21 school-board members; in Cincinnati, 30; in Boston, 24; in Baltimore, 22; in New Orleans, 20; in Chicago, 21; and in Milwaukee, 36. Today there are in St. Louis 12 school-board members; in Cincinnati, 7; in Boston, 5; in Baltimore, 9; in New Orleans, 5; in New York, 7; in Chicago, 11; and in Milwaukee, 15.

In 1895 the median number of school-board members in 20 cities listed in the Report of the Commissioner of Education was 20; today the median number in these same cities is 7. At present comparatively few boards of education are composed of more than 9 members each. School boards were reduced in size when it became evident that a board of many members was unwieldy and likely to assume duties more properly belonging to the executive officers rather than to the board itself. It was evident, too, that large boards were retarding the development of the school systems over which they had control. The reduction in the size of school boards has undoubtedly been one of the great achievements in the field of school administration.

## Selection of Board Members by Wards Abandoned

An even greater achievement has been the abandonment of the method of selecting board members by wards, and incidentally this method of selection was in some instances responsible for large boards, since each ward of a city had one or more representatives on the board of education. If there were, say, 10 wards in a city each represented on the board by 2 members, the school board of that city was composed of 20 members. As the number of wards increased with the growth of the city, the number of school-board members increased.

Under the ward system school-board members were not inclined to consider themselves responsible to the people of the entire city but to their ward constituents. "I'll get all I can for my constituents" was often the slogan, even if not publicly expressed, of the ward representatives. To accomplish this end "log rolling" was frequently resorted to. In the selection of teachers, ward representatives were often permitted to name the teachers for their respective ward schools. Another evil was the locating of school buildings by wards rather than by careful planning, since members of the school board in order to please their constituents demanded school buildings for their respective wards. This resulted in a large number of small school buildings when a fewer number would have served the school population much more economically and efficiently.

The evils of the ward method of selecting school-board members can, however, be better described by quoting the following from the 1895-96 Report of the U. S. Commissioner of Education:

Ward politics is a matter constantly before the mind of school law-makers, and any amount of inventive genius has been exercised to devise a way of choosing school boards that would make it impossible for the ward boss to interfere. Incompetent principals and teachers chosen to "encourage" political henchmen; contracts corruptly given to fatten the treasuries of partisan organizations; assessment of teachers for campaign funds; unseemly intrigues, strifes, and bickering within the schools themselves by adherents of different parties; the son of some local heeler allowed to be habitually unruly, to the detriment of general school discipline, because the teacher fears for his position if he attempts to assert his authority—all these evils and more are feared by those who have seen the results when local politics has had undue influence.

Although conditions under the present method of selecting board members from the city at large may not be all that might be desired, since there are big city politicians as well as little ward politicians, it is doubtful whether conditions in any city are such as those described by the Commissioner of Education in his 1896 Report.

## Few Standing Committees

Another development in the administration of city school systems worthy of note is the tendency to abolish standing committees or to reduce the number of such committees. When boards of education consisted of many members they operated chiefly through many standing committees. In a publication of the Bureau of Education in 1885 is found the following statement in regard to committee organization at that time:<sup>2</sup>

There are two prevailing types of organization for the performance of administrative duties, of which St. Louis and Cincinnati may be taken as examples. The St. Louis board has only 12 standing committees, which are as follows: Teachers; lands and claims; leasing; building; course of study, textbooks, and apparatus; auditing; publications and supplies; the library; janitors; ways and means; salaries; and rules and regulations. Of these committees only three have direct reference to matters relating to instruction and discipline, the other nine being business committees. There are no committees whatever on school districts or schools, although the committee on teachers acts as a standing committee on the normal school and is required to visit and perform some other duties in respect to the high school.

<sup>1</sup>Chief, Division of American School Systems, U. S. Office of Education.

<sup>2</sup>Circulars of Information, No. 1.

The Cincinnati board of education, on the other hand, has 25 standing committees, designated as follows: Boundaries; buildings and repair; claims; course of study and textbooks; discipline; drawing; examinations; fuel; funds and taxes; furniture; German department; gymnastics; law; lots; music; night schools; normal school and teachers' institute; penmanship; printing; reports and excuses; rules and regulations; salaries; stoves and furnaces; supplies; and ungraded schools. In addition to this formidable array of standing committees, there are 34 subcommittees on districts and schools. Nor does this complete the list. The "union board," composed in part of members of the board of education, which has charge of the high schools, employs in the performance of its functions no less than 15 committees, so that the management of the whole system of schools is shared by 74 committees.

The publication does not state how many cities followed the St. Louis type and how many the Cincinnati, but it does state that the Chicago board with 79 committees belonged to the Cincinnati type and that Cleveland followed the example of St. Louis "in dispensing with district committees altogether and in judiciously limiting the number of standing committees."

It appears from the foregoing account of committee organization about 50 years ago that 12 standing committees was not considered an excessive number. City boards of education now operate with no, or with comparatively few, committees. It has become evident that the functions assigned standing committees such as those on promotion, courses of study, textbooks, and teachers, properly belong to the superintendent's office, and that the office of superintendent is the agency to compile information on the various phases of the school system and to present the facts to the entire board to guide it in the formulation of policies.

#### The Superintendent the Executive Officer

Before 1900 and even later the opinion prevailed that educational and school business matters were so unrelated that an executive officer independent of the superintendent was needed for business affairs. Thus a dual system of administration came into existence — one department concerned chiefly with instruction and the other with business matters. It is now generally agreed among authorities on school administration that educational and business affairs should not be divided between two executive officers each directly responsible to the board of education, since educational and business problems so overlap and intermingle that it is not possible to draw a line between the two. For example, the selection of supplies and equipment are obviously no less educational than business problems.

With a clearer understanding of the relation of business matters to those dealing with instruction, there has been a tendency among boards of education to adopt the unit plan of school administration by making the superintendent responsible for the administration of every phase of the school system. This does not mean, of course, that in a large-city school system the superintendent himself supervises classroom instruction and purchases supplies and equipment, but it means that the direction of all activities are unified in a single executive officer.

Even in the days when the superintendent had charge only of the educational department, he was not always consulted by the board of education about the certain matters connected with the management of the department. Boards of education, however, began to conclude that if the superintendent was to be held responsible for what went on in the classroom he should nominate the teachers. As a result of this realization on the part of the school boards they now, with few exceptions, appoint only those teachers recommended by the superintendent of schools.

#### Increased Qualifications of Teachers

The policy adopted by boards of education some years ago of employing only those elementary teachers with two years of professional preparation above the completion of a 4-year high-school course was a forward step. More recently another important step has been taken by many boards of education by employing no teacher with less than four years of college education. Fifty years ago it was possible for a person with but little more than an elementary education to obtain a teaching position in some city school systems; especially was this true in the states in which the public normal schools admitted elementary-school graduates and made full-fledged teachers of them in two years or even in less

time. A few of the large cities, however, maintained 2-year normal schools to which only pupils who had completed the high-school course were admitted. An example of this type of school was the city normal school of St. Louis which, according to a publication of the Bureau of Education<sup>3</sup> was at that time the most completely developed type of normal school in the country. In some of the cities having normal schools the course was limited to one year beyond high school, while in some other cities the normal course was a department of the high school.

The city normal college of New York City which performed the twofold function of a girls' high school and a normal school received its pupils directly from the grammar school. In the high school of Pittsburgh there was a normal department to which pupils came directly from the grammar schools to pursue a 2-year course differing not materially from the academic course.

From the foregoing description of teacher-preparing institutions of about 50 years ago it is clearly evident that even in the large cities elementary-school teachers with but little preparation were employed. At that time high-school teachers in general had no professional preparation, since such preparation was not demanded and since comparatively few universities and colleges offered courses in secondary education. Graduation from the arts and science courses was not always a requirement for appointment to a high-school teaching position. Now high-school teachers, in general, to be eligible for appointment must have completed 4 years of college work, including 15 to 20 semester hours of professional preparation, and the tendency is to require the completion of one year of graduate work.

#### Better Planned School Buildings

In 1890 and for a number of years thereafter boards of education gave but little attention to the selection of suitable school sites, it being not unusual to place a small schoolhouse in each ward and often on a site that was not desirable for any other purpose. No careful studies were made of trends in the growth of the school population in the various sections of the city in order to predict school-building needs over a period of years. Now such studies are made. Schoolhouses were usually planned by a contractor or by an architect who while he may have been good at planning other kinds of buildings knew almost nothing about the functional planning of school buildings. Now the planning of such buildings is a job requiring the services of an architect who has specialized in schoolhouse construction. Although he is a specialist he does not go ahead and plan school buildings by himself, but he consults the school officials in order to learn what the program of studies is and for what purposes the building is to be used, and to obtain recommendations regarding the kinds of rooms needed for the effective functioning of a modern educational program. The architect obtains such information and advice because he knows that the school buildings he constructs will be judged largely upon how well they have been planned to carry out the educational program adopted by the board of education.

#### Educational Research Developed

The growth of a scientific attitude on the part of school administrators toward education has also been one of the significant developments in city school administration. Fifty years ago there was not a department or a bureau of research connected with any city school system. In fact "educational research" as it is now understood was not a part of the schoolman's vocabulary. In the 90's, however, Dr. J. M. Rice published a series of articles in *The Forum* in which he called attention to the need of research in the field of education. He tells in his *Scientific Management in Education* that at a meeting of the Department of Superintendence in 1897 he endeavored to arouse a discussion on a question which he stated somewhat as follows: "In some cities ten minutes a day are devoted to spelling for 8 years; in others, 40. Now how can we tell at the end of 8 years whether children who have had 40 minutes are better spellers than those who had only 10." He says that the first to respond was a very popular professor of psychology engaged in the training of teachers who said,

<sup>3</sup>Bureau of Education, Circular of Information, No. 1, 1885.



in effect, that the question was one that could never be answered and that the time of such an important body of educators should not be taken up in asking them silly questions. It appears, too, that the comments among the audience were anything but flattering to the speaker who had propounded the question. "After the meeting of superintendence in 1897," reports Dr. Rice,<sup>4</sup> "the question of educational results was not to my knowledge again brought before them until 5 years later (February, 1902) when Dr. Paul Hanus, Professor of Education at Harvard University, came out in the strongest support of the idea."

It was, however, not until 1912 that research bureaus began to be organized in city school systems. That year, Rochester, N. Y., and New Orleans, La., each established an educational research department or bureau. The next year such departments or bureaus were organized in the school systems of New York City, Baltimore, and Schenectady. Since that time many other cities have followed the example set by the city school systems that pioneered in the field of educational research. It must not be inferred, however, that research has not been carried on in the school systems that do not have organized research departments, since every city school superintendent is interested in developing some form of educational research to assist him in solving his problems.

Educational research has developed to such an extent that if it had been possible for Dr. Rice to attend the meeting of the American Association of School Administrators in St. Louis in February he would have heard many addresses dealing with research. In fact he could have spent several days at the meetings of the American Educational Research Association listening to the reading of papers giving the findings of various research projects and to the discussion of these papers. Such questions as he raised at the meeting of the Department of Superintendence in 1897 would no longer be considered silly.

#### School Administration Becomes Democratic

Although a school administrator here and there may be accused of being a dictator, the administration of city school systems on the whole is much more democratic than it was half a century ago. The administrative aspect of curriculum construction may be given as an example of the tendency toward democratic

school administration. Once upon a time the superintendent of schools was the curriculum maker. He prepared, sometimes with the aid of scissors and paste, courses of study and handed them to the principals and teachers who had had no part in their preparation. During the past 20 or 25 years curriculum construction has become a cooperative enterprise of principals, supervisors, teachers, and others.

The participation of principals and teachers in such matters as the selection of textbooks, the formulation of teacher-rating schemes and pupil report cards, and the formulation of plans for the classification and the promotion of pupils may also be given as examples to show that school administration is more democratic now than it was 50 years ago.

The democratic spirit in school administration has also become manifest in the provisions made in many school systems for the participation of student councils in matters of direct concern to the student body.

The organization of the schools to meet the individual needs of the pupils has, however, been the most important development in democratic administration. The method of half a century ago was largely to fit the child to the school rather than to adjust the school to the child. Dr. W. T. Harris and others called attention to this defect in school organization, and when Dr. Harris was superintendent of the St. Louis schools he took steps to provide a somewhat flexible system for the classification and promotion of pupils. Since the time he called attention to the "Procrustean Bed of Grades" the schools have become better adjusted to the child. This has been accomplished to a certain extent by the organization of groups, each consisting of pupils who are fairly homogeneous in ability; by the introduction of individual instruction schemes; by organizing primary and intermediate grade units within which grade lines are eliminated; and by providing special schools and classes for those children whose needs cannot be met satisfactorily in the regular classroom.

Although there has been marked development in adjusting the school to the child much yet remains to be done in this respect. This is probably the greatest problem facing school administrators. Such problems as those relating to school-board organization and to relationships that should exist among the administrative staff are insignificant compared with the problems relating directly to the children for whom the schools exist.

## Fifty Years of School Seating

Henry Eastman Bennett, Ph.D.<sup>1</sup>

The first school-seating advertisement in the columns of the SCHOOL BOARD JOURNAL appeared in May, 1891. In a modest 2 by 3-in. space, Manitowoc Manufacturing Company presented as "a new feature in school seating" the "Oxford Automatic School Seat" which was "conceded by all to be the best desk on the market." Near it was an advertisement showing the earth with the familiar Schlitz belt around its beery rotund middle, an announcement of bargains in black silk, and, dominating the page, was an appeal to teachers to substitute for corporal punishment inspiring beautiful rewards of merit in the form of watches, "silver, \$1.50 to \$2.50; gold, \$2.50 to \$5.00. Special discount to teachers."

Manitowoc's claim was repeated in the June number on the same page with a blatant contradiction four times as large from the Grand Rapids School Furniture

Company. G.R.S.F. tells 'em aplenty about the "Here you are! Improved Perfect Automatic for 1891," including the following, "Are you a judge? Do you know what 'Automatic' means? Ignorance is excusable. Look in a dictionary. It will tell you. You shouldn't be blamed for what you don't know or don't understand. It's what you might know, and *won't*, that counts. There are so-called automatic desks upon the market — child killers — and other funny (?) things as well." Gentle Reader of 1940, do *you* know what "automatic" means as applied to a school desk instead of a gun? Perhaps, after a half century, still "ignorance is excusable. Look in a dictionary." (It won't tell you.)

Despite G.R.S.F.'s final blast, "There is but one!" in large capitals, there appeared beside the same ad in the August number another small display announcement of "Automatic School Furniture, Elegant Designs" by the Haney School Furniture Co. also of Grand Rapids, "Inventors and

sole owners of the Automatic School Seat Fold"; as well as one by the Sidney School Furniture Co., Sidney, Ohio, offering the "Celebrated 'Fashion' Desk. Over 2,000,000 in daily use." (G.R.S.F. announced "90,602 made and shipped last year.")

#### Old-Time Automatic School Desks

All the desks in question were the still familiar cast-iron combination desks with the seat hinged to the desk behind and usable only in straight rows screwed to the floor. They were mostly double desks, although often the seat was divided to lift for each pupil separately. The cast-iron standards were all elaborate rococo dust-catchers, and the woods were in alternate strips of red cherry and light natural finish. These features were standard. The war was about the word *automatic* — the school-seating problem of the time. Apparently the term was originally applied to those desks whose seats folded up "automatically" when the pupils, rising to re-

<sup>1</sup>Specialist in Educational Research, American Seating Co., Grand Rapids, Mich.

<sup>4</sup>Rice, J. M., *Scientific Management in Education* (New York: Publishers Printing Company, 1913), p. 18.

cite, pushed them up. But Grand Rapids School Furniture placed the hinge point and weighted the seat so that "it folds itself noiselessly without being touched with the hands or the legs," hence, "No more pinching of toes, barking of shins, breaking of legs or marring of seats when running across them." No wonder "Progressive people look to us for all valuable improvements." However actively automatic they may have been when new, such of these desks as have survived five decades of schoolroom usage are too old and tired to fold themselves now without help.

At that time, a round half century ago, there were numerous school-desk manufacturers scattered all over the land, and all were making "automatic" desks which differed essentially only in the filigree pattern of the cast-iron standards. Any foundry could buy slats and desk tops from a convenient woodshop, or a woodshop could buy its castings, or an energetic salesman could buy both, and set up as a school-desk manufacturer. Woods and irons often came from widely separated sources and first met at the point of installation. They were cheap, crude, noisy, and uncomfortable—but millions of them are still in service.

There had been some feeble efforts to produce something better, especially in Boston. Chandler, in Massachusetts, had fair success with a separate desk and chair. Thomas Kane of Racine had sold a combination desk the top of which could be used at two writing slopes, turned back as a book rest for study, and turned down and locked when unoccupied. New York City had desks made at Auburn Prison with special tops a part of which was hinged and turned back as a reading rest. These promising devices failed through the lack of relation to the anatomy, the posture or the visual range of those who were to use them, and because of mechanical and price difficulties. Few survive.

#### A New Era in the Industry

Nearly a decade passed before Thomas M. Boyd, then associated with the Sidney School Furniture Company, conceived the idea of bringing order out of chaos by establishing and stabilizing a public seating industry. It was an era of mergers and during about six years some twenty-five concerns making school, church, and opera seating were consolidated into the American Seating Company. Manufacturing operations, at first scattered from Massachusetts to Oregon, were gradually centralized into the world's greatest plant of the kind, at Grand Rapids.

The first effort to break away from the traditional cast-iron supports apparently was made by the Moore Brothers of Indianapolis, still operating as the Columbia School Furniture Company, who, about 1905, offered a desk constructed with bars of angle iron, and later followed with a movable chair desk of similar construction which is still on the market. About this time the American Seating Company de-



*An adjustable desk first advertised in 1894. This desk, known as the Roulstone, was made by the Chandler Adjustable Chair and Desk Company of Boston.*

veloped at the Grand Rapids plant a combination desk of triangular tubular steel which proved to be the most successful type ever made, "more than five million in use and still going strong."

In 1906 William B. Ittner, celebrated St. Louis school architect, designed the massive central pedestal type of support for combination desks; a contribution to the cause of freedom for legs, knees, and janitors, but the ultimate in immobile rigidity.

Meanwhile the separate stationary "box desk" and seat, like other New England educational influences, had broken its territorial confines and dissipated somewhat its prestige in the course of its westward spread. In its early forms it had carried an adjustable "kidney-pad" type of back support, an interesting but unsuccessful recognition of the claims of posture. A more successful influence was its separate adjustability for height of both seat and desk.

Around the turn of the century, "automatic" combination desks also were offered in adjustable form, and later the single pedestal type embodied the principle, but neither the forms of construction nor the ideals of usage which prevailed in combination desks were favorable to effective adjustment. The very general failure to utilize adjustments when available may be ascribed to two major causes: (1) the lack of definite provision or responsibility for making the adjustments, (2) the insistence of school hygienists on impracticably precise and usually incorrect standards of adjustment.

#### The Advent of Movable Seating

In the interest of deformalization, the recitation benches which formerly stretched across the front of the classroom were eliminated along with the teacher's platform. In many primary rooms their place was taken by a number of light chairs which could be drawn up around the teacher for cozy group instruction. The current ideal for the modern "activity-program" classroom demands, as supplement to the completely individualized movable

seating equipment, both several extra chairs and one or two large project tables.

Ordinary wood chairs with tablet arms were finding increasing use in high schools and colleges and the tablet arms were sometimes enlarged to almost desk-top size, but to Colonel Moulthrop, a Rochester, N. Y., principal, goes the credit for popularizing the movable-desk idea. He developed a sturdy wood chair-desk with book drawer under the seat, extended foot for greater stability, and a top adjustable for height, slope, and distance. The idea attained wide popularity among educators, extensive sale, and many imitators. Recognizing its inherent limitations, however, Col. Moulthrop soon turned his attention to a more promising type and devised the Moulthrop Universal Desk, having seat and desk separately and adjustably supported from a movable frame. Both these revolutionary developments, from which date the swing to movable school seating during the past twenty years, were at first manufactured by the Langslow-Fowler Company of Rochester and later sold to the American Seating Company.

It was inevitable that steel should rapidly displace wood for the structural members in movable classroom seating, for reasons of greater strength, lightness, durability, and economy. Cast iron, because of its weight and brittleness, has never been regarded as suitable for the purpose except in a heavy semimovable pedestal type developed in the "Welfare" desk. Both the chair desk and the "Universal" types, originated by Col. Moulthrop have been progressively refined by the leading manufacturers during the past two decades and in steel designs are now the standard movable school desks of the industry. The chair desk, usually with adjustable top, has held the low-priced movable-desk field. Either crude-stock angle iron or pressed steel of similar form has almost invariably been the structural material used in its fabrication because of the resistance of angle forms to bending strains and its adaptability to inexpensive construction. At best, furniture of such construction is ungainly and contributes little of grace or beauty to the classroom. The next forward step should be the developing of steel supports more amenable to graceful design.

#### An Acceptable Improvement

The "Universal" type has rather surprisingly justified its pretentious name by proving itself adaptable to every sort of refinement and improvement which manufacturers have been able to devise. The single steel tube is the most logical and effective means of combining seat and desk into a single movable unit. Various clamping devices have provided separate height adjustment for seat and desk. Seat swivels of varying effectiveness are standard equipment, and seats may embody any degree of excellence which the knowledge and care of the designers can contribute, even to self-adjusting backs and upholstering. The



desk part may be a simple study top without book storage, a rigid open-front box, or the most advanced form of lifting-lid box with variable writing slopes, antislam friction hinges and sightsaving reading devices. The Universal type "has everything" so far developed and seems to be the most promising medium for further development.

In the educational reaction against the cold formality of classrooms and their rigid fixed furniture, which prevailed almost without exception fifty years ago and is still distressingly common, some extremists swung to the theory that there should be nothing in a schoolroom that made it look like a schoolroom. It was suggested that desks of every kind along with blackboards and wardrobes should follow birch rods, stoves, pail and dipper, and common towel into the discard. However, pupils must sit and have some place to work or even to learn through play. Hence sundry amorphous tables and chairs here and there assumed the functions of desks. At first, every constructive principle of effective seating of pupils was discarded along with the desks, but Time, which corrects most radical tendencies, is gradually confining this type of furniture to its legitimate sphere of usefulness and, in collaboration with art and industry, is developing it into an indispensable contribution to the progress of school equipment. Out of a motley of planing mill products, kitchen furniture types, attractive period designs, and modernistic tubular structures, are evolving chairs and tables functionally and esthetically suited to classroom uses.

### The Outstanding Achievement

The outstanding accomplishment in school equipment during the SCHOOL BOARD JOURNAL's half century of usefulness is the transition from stationary to movable types of regular classroom seating. Nearly all of this has occurred during the latter part of the period, following upon the initiative of Colonel Moulthrop. Twenty-five years ago practically all of the classroom seating sold by the industry was of stationary types, the exceptions being mostly kindergarten equipment and various wood tablet-arm chairs used in high schools. Today, more than 80 per cent of classroom seating purchased is movable, and some of the largest cities which have been the slowest to change are making the transition. Since barely 3 per cent of the sittings are replaced annually, in new and old buildings combined, it will be many years before the percentage of movable seating in use will approach the present percentage in purchases. But the change is unquestionably here and will continue irresistibly.

As in all things educational, the pendulum swing to movable seating has undoubtedly gone too far. There are and always will be certain types of study halls and higher grade classrooms where the lecture type of instruction prevails, where large groups change from room to room at regular intervals, and where seat movement has no value. In these, movability of the

seating is as illogical as its rigid immobility is in an elementary classroom. Even where the movable seats are most desirable, they often do more harm than good because of the lack of intelligent control and supervision of the moving. The moving of the seats not infrequently contributes directly to eyestrain, disorder, distraction, and wastes of time and space. This, however, generally indicates not that seats should be less movable, but that teachers should be better trained.

Dominant factors in the selection of school seating during this half century of progress have been considerations of changing methods of teaching, ideals of management and discipline, policies of supervision and administration, conceptions of architectural harmony, specifications and legal purchasing restrictions, convenience of janitors and influence of their labor organizations, kinds of flooring used, sales arguments by the agents of competing manufacturers, demonstrations of "bolts, screws and varnish," and — always — price. "The child," to be sure, has been a convenient smoke screen used to soften the harsh outlines of effective arguments and to blend them gently into pedagogical generalities. But until recent years "the child" was at best a vague unanalyzed factor adumbrated in the background but having little influence on the designing, manufacturing, or purchasing of seating equipment. Occasionally he entered the picture fragmentarily, as a form of "initiative and spontaneity," as a destructive tendency, as a "bundle of impulses," as a mental concentrating mechanism, as a formless plastic ready for a postural mold, or merely as a piece of educational impedimenta needing a place to be put.

### What Science Contributed

It was a decade and a half ago that leaders in the seating industry decided the time had come to reintegrate "the child" and study him from all angles simultaneously as a sitter. To a professor, diverted from the seats of learning to the learning of seats, was delegated the task of searching out and correlating what anatomy and medical science had found out about the growing child's skeleton, musculature, organic structure, and functioning; his habit-forming propensities; and his postural tendencies, deficiencies, and malformations. With this material was combined the tabulated and correlated data from the segmental measurement of several thousands of actual school children of all ages and stages of development. From such tangible basic information began the scientific redesigning and redimensioning of school seats and desks. It was felt that at least a start toward scientific procedure was made by going back as nearly as possible to the ultimate authority of the Great Designer of children and Determiner of the way they grow.

A secondary line of investigation involved visits to several thousand classrooms, distributed from coast to coast,

from kindergarten to university, from one-room rural to the largest urban schools, and from the most impoverished to the gilded aristocratic communities. Included were random sampling visits and systematic surveys. Seating equipment found and analyzed included every standard and freakish type, every kind and style, every make, color, and previous condition of servitude, and every stage of brand-newness and dilapidated antiquity. Discerning judgments and cocksure opinions were gathered from superintendents, supervisors, architects, teachers, and janitors and from those who sit in the seats; from hard-boiled purchasing officials and soft-boiled theorists. At least a broad view has been attained of what American children sit on, how they sit, and what they and the educational world think about their sitting and seating.

Meanwhile, in a factory laboratory, an increasing array of machines has been outdoing the worst of bad boys at their own game of defacing and breaking up furniture. Strict records are kept of the scores in this smashing contest as a means of guiding the engineers in developing seating that is wear-, tear- and boyproof. With a large percentage of its products of fifty years ago still in use, heaven help an industry that makes them any more durable! True, the endurance tests are applied mostly to the newer sorts of mechanisms and constructions to make sure that they will hold up as well as the old indestructibles, and to finishes in order that they may retain an elegance that the older varnishes never had.

In the matter of finish, not only has tough, dull lacquer replaced the glossy and sticky varnishes of a half century ago, but the zebra-like alternating light and dark slats, after succeeding epidemics of cherry reds, moss greens, and jaundiced "natural" color effects, have been standardized at a neutral "school furniture brown." This standardization was brought about under the guidance of the Interstate Commerce Commission. Although criticized by color-sensitive esthetes at times, incalculable public benefits have resulted from this color policy, not only in making a very desirable high-grade stock finish available at greatly reduced costs, but in saving youth from the terrors of rampant individualized color schemes.

### Postural Habits of Child Considered

The best current models of school seating appear to have attained a high standard of conservative excellence and of scientific postural design. Few, if any, manufactured things of a comparable sort, provide a higher degree of service durability. The varied available types provide for every diverse educational method and requirement. Fussy Victorian designs have been modernized in sanitary and pleasing simplicity. The latest models exhibited lay claim to streamlined modernity and are believed by foremost designers to embody

(Concluded on page 125)

# Scientific Laboratory Furniture During the Past 50 Years

C. G. Campbell<sup>1</sup>

An examination of the comparatively few laboratories existing in the United States on the first day of March in the year 1890 would have disclosed almost a total lack of scientific laboratory furniture highly specialized to function efficiently as one of the important basic tools of the scientific laboratory. Industrial control or research laboratories were few and far between, and educational laboratories were limited pretty generally to demonstration courses. Mechanical services were largely lacking and mechanical fume removal virtually unknown. Crude workbenches were usually built into place in the laboratory by carpenters, and all sorts of domestic and office furniture was roughly converted to laboratory usage. Corrosion-resistant alloys and finishes were not available, and specialized corrosion-resistant laboratory service fittings, troughs, sinks, and drainage materials were not yet developed.

A decade was to pass before the scientific laboratory-furniture industry had a small beginning in the standardized manufacture for sale of a few designs of chemical benches, and the infant industry required still another decade to produce a small but representative series of tables, desks, cases, and cabinets designed to fill the laboratory-furniture needs of that day in all of the natural and physical sciences.

The growth of the industry from 1910 through 1920 was slow, but the world war taught America the need for national self-economy and gave a tremendous impetus to applied science in American industry. This created a powerful stimulant to scientific education and the consequent need for a vast expansion in educational laboratory facilities, which in turn, coupled with the growing demand for industrial control and research-laboratory facilities, created a continually expanding need for properly designed and manufactured scientific laboratory furniture through the 1920's.

The expansion of the industry in the 1920's made possible the development of new materials especially designed to combat corrosion and provide maximum convenience and utility in laboratory furniture with economical long-lived usefulness and a minimum of expense in maintenance.

## When Industry Resorted to Research

During the 1920's research work was begun by leading firms in the industry with the purpose of developing improved materials to add to the utility and serviceability of laboratory furniture, and this research work has constantly been continued and expanded and has resulted in

the numerous and important improvements in product that are available to the informed purchaser in the educational and industrial laboratory at the present time.

Fifty years ago the chemistry-laboratory equipment in the educational laboratory was likely to consist of a small preparation room with several workbenches and a few miscellaneous cases and cabinets containing an assortment of apparatus that was often largely homemade. Practically nothing in the way of mechanical services was provided. This preparation room was augmented by a demonstration table, in an adjacent lecture room, that more often than not provided little beyond a plain working surface for the convenience of the instructor. Ventilation for the removal of obnoxious fumes was either totally lacking or was inadequate. Little or no science was taught in the secondary school and only a limited number of larger colleges provided even reasonably adequate laboratory facilities for individual laboratory work on the part of the student.

The furniture of this period was generally built of solid wood throughout. Satisfactory waterproof glues had not yet been developed. Waterproof plywood, as it is known today, was not available. None of the wood finishes which could be obtained at this time were in any fashion resistant to the acids, alkalis, or solvents commonly used in the laboratory. Iron sinks deteriorated rapidly when chemical waste was poured into them.

Since there was no group of manufacturers engaged in the manufacture and sale of specialized laboratory furniture there was no determined effort to provide materials that would stand up under the conditions of use to which laboratory furniture is subjected. As a result, the attitude of the times conceded that any furniture installed in the chemical laboratory would deteriorate rapidly, and most of the laboratory furniture built to special order for the laboratories of that period was built cheaply with the view of frequent replacement in mind. The furniture was bulky and wasteful of space, and the use of small solid panels necessitated the use of numerous cove moldings on the exterior of the cabinetwork so that cleansing and polishing were difficult. Since esthetic values were not highly regarded in the laboratories of this time, little attention was paid to attractiveness of design.

## What the Chemistry Laboratory Offers

Today the average secondary-school chemistry laboratory will provide each student with individual drawer and cup-

board space, individual scientific apparatus, adequate working surfaces to permit him to carry on personally, or, in any event, in groups not larger than four, all of the experiments prescribed in the modern course of study, and will place for his convenient use hot and cold running water, gas and a.c. and d.c. electricity, and often, in addition to these services, compressed air, vacuum, and steam outlets. Further, each student or small group of students has drainage in the form of troughs or sinks, or both, conveniently available, while properly designed fume hoods and adequate mechanical ventilation so thoroughly remove obnoxious fumes and gases that the modern chemistry laboratory becomes as pleasant and healthful a place in which to work as any department in the school.

Modern laboratory furniture for the chemistry laboratory utilizes many materials that did not exist fifty or even twenty years ago. Thoroughly waterproof plywood has combined complete resistance to water, and greatly added strength, with a distinct saving in bulk and a definite increase in net storage capacity in a given piece of laboratory furniture. The use of waterproof plywood has permitted the construction of furniture having flush exterior surfaces that can be easily maintained in a state of cleanliness. Impregnated fiber drawer and cupboard bottoms have been provided that offer protection against chemical accidents. Lead-coated alloyed-steel drawer runs provide smooth and jarless drawer operation. Plywood drawer heads and doors eliminate binding and rattling from expansion and contraction of the wood with seasonal changes. Laminated table tops of impregnated fiber material eliminate the opening of joints in table tops and provide quite comfortable working surfaces. Chemical-resistant, metal-reinforced, plastic hardware eliminates hardware tarnish and corrosion under laboratory conditions. Acid, alkali, and solvent-resisting baking enamels and spraying lacquers protect table tops and cabinet bodies from unsightly marring due to the accidents that are inevitable in laboratory work.

Corrosion-resistant alloy steel, coated with lead and further protected with highly acid, alkali, and solvent-resisting high-bake enamels, have made available laboratory furniture of all-metal construction that offers marvelous protection against corrosion in the laboratory and provides added protection against fire. Impregnated asbestos materials provide corrosion-resistant fireproof fume hoods that are extremely attractive and will function with a minimum of maintenance. Attractiveness of de-

<sup>1</sup>President and Gen. Manager, Kewaunee Manufacturing Company, Kewaunee, Wis., Adrian, Mich.



sign is an important consideration in the manufacture of present-day laboratory furniture, and the development of the roll-edge, flush exteriors, used in the better, modern laboratory furniture have provided dignity and attractiveness that adds much to the appearance of the laboratory.

### Progress in Laboratory Furniture

What has been said about the laboratory-furniture equipment of the chemistry laboratory fifty years ago as compared with present modern installations is equally applicable to all of the other sciences. The use of the highly technical receptacles and wiring circuits built into laboratory furniture for the physics department has permitted the physics laboratory to keep pace with the vast progress in the field of electricity.

The use of highly technical darkroom furniture providing all of the services necessary for the various steps in photographic processing has permitted students to keep abreast of the startling physical and chemical developments in the wide field of photography in which there is so much technical, amateur, and professional interest today. Modernly equipped biological laboratories with suitable growing beds, aquaria, and properly designed storage and display equipment for specimens have brought the manifold workings of the world of nature within the grasp of the boys and girls in our secondary schools. An intensive course in agriculture can be given with maximum efficiency in the newly equipped agricultural laboratory in secondary schools serving our rural areas.

A rudimentary knowledge of all of the natural and physical sciences is available to the student in the modern American secondary school, and this knowledge is obtained not by a study course alone but rather by self-performance of experimental laboratory work under conditions and with facilities reasonably well approximating those under which advanced work can be continued in institutions of higher learning, or under which the student may function in applied science in industry.

It has become a precept in the field of scientific education that knowledge, if it is to be retained, must be secured by use of the hand as well as the brain, and it is generally recognized that the laboratory method of teaching science is essential to a sound secondary-school training whether such training is to form the basis for advanced work in science in the school of higher learning or whether the purpose of the course is merely to acquaint the student generally with the application of science to his daily life. However, adequate laboratory training in the various sciences is only possible in our normally crowded secondary schools by so planning and equipping a laboratory that large classes of students can be accommodated in a single section and the maximum number of sections of students can be accommodated during the school day.

### Meeting the Problem of Larger Classes

Large classes in the minimum possible laboratory space means extremely careful equipment planning to eliminate noise, confusion, and interference between students. This involves providing every necessity in mechanical services at each student position to avoid necessity for the student moving about the room in his work. The accommodation of the maximum number of sections of students during the school day necessitates careful planning to provide convenient and adequate allocation of storage space for the personal equipment of each member of each section of students. Larger classes also mean that increased conveniences to instructor supervision must be provided if the best teaching results are to be obtained. All of these pedagogic requirements have been met by the scientific laboratory-furniture industry in the production of laboratory furniture that provides more and greater conveniences to the student and instructor alike in constantly less space. In modern practice 36 student classes can be accommodated today in rooms having a floor area that would have accommodated a maximum of 24 students just two decades ago, and each student today has many added conveniences with which to do more efficient work.

Coincident with the growing demand for scientific education and the vastly increased number of students to be provided for has come a demand for a reduction in cost in per-capita outlay for equipment. This has constituted a real challenge to the progressive members of the laboratory-furniture industry, who, on the one hand, were being required to constantly add conveniences in the form of added mechanical services in order to accommodate larger numbers of students efficiently in a given space, and were, on the other hand, faced with the necessity of adding these conveniences at a reduction in equipment cost per student.

The answer to this perplexing problem lay in continued and expanded research work designed to produce materials and constructions that would permit a better article of laboratory furniture to be marketed at a decreased cost per student. The laboratory-furniture industry has been quite successful in this respect, as witnessed by the fact that four sections of 36 students each can be provided for in a modern chemistry laboratory today at less cost for laboratory furniture than was involved in equipping the same laboratory twenty years ago to provide accommodation for two sections of 24 pupils each.

Science plays a role of constantly increasing importance in the national life of America. Each day brings new scientific achievements that in turn create new products and industries. Thousands of industrial research and control laboratories are being maintained and expanded in the competitive industrial race for new and better products and lower costs. The con-

stant need for trained scientists will continue to demand expansion of our educational facilities for training scientists. Laboratory furniture of constantly improved materials, design, and construction will be required, and the laboratory-furniture industry is constantly striving to anticipate the demands made upon it by progress. We have come a long way during the past fifty years but feel confident that the scientific achievements of the future will take us much farther toward the ultimate goal of a perfect product.

No small part of the credit for the achievements of the scientific laboratory-furniture industry is due to the fine spirit of helpful cooperation which the SCHOOL BOARD JOURNAL, through all its years, has rendered the industry by keeping the industry fully informed of ever changing trends in the broad field of education and by their helpful counsel in the industry's relationships with the American educational system.

### SCHOOLHOUSE ESSENTIALS<sup>1</sup>

Dr. Burnham, of Clark University, has compiled the conclusions of the best European and American authorities on the subject of school sanitation. We quote the minimum requirements which all these experts agree upon as affording reasonably good sanitary conditions:

1. School buildings should not be more than two stories high.
  2. All schoolrooms should contain air space equal to 250 cubic feet per pupil.
  3. All schoolrooms should contain floor space equal to 20 square feet for each pupil.
  4. The square feet of window surface should be at least one fifth of the square feet of floor surface.
  5. No pupil should be seated farther away from the window than one half times the distance from the top of the window to the floor.
  6. No schoolroom should be heated by direct radiation.
  7. Air from the outside should always be used to furnish fresh air for the rooms.
  8. Quantities of fresh air moderately warm should be furnished, and in no case should fresh air be heated to high temperature, because it is thereby vitiated.
  9. Pupils should be furnished at least thirty cubic feet of air per minute.
- Supt. E. S. Harris, of Poughkeepsie, N. Y., in submitting this information to his school board, asks that a careful investigation be made to determine how much imperfect sanitary conditions have to do with (1) irritability and restlessness of the pupils; (2) weariness of the teachers; (3) recurrent headaches; (4) colds; (5) the spread of disease (Are disease germs allowed to float about the school because they are not rushed out by proper ventilation?); (6) deformities from improper postures; (7) defective vision.

<sup>1</sup>An editorial published in the JOURNAL, May, 1899, p. 10.

# The School System and the City

Edward A. Fitzpatrick, Ph.D.<sup>1</sup>

I welcome the opportunity to participate in the fiftieth anniversary of the birth of a germinal idea that has brought forth fruit a hundredfold, and I must not forego a word of appreciation for the layman whose faith and courage and vision, growing out of his own need as a member of a school board, has played no little part in the amazing growth of public school administration in this country in the past half century: William George Bruce.<sup>2</sup>

I am asked to discuss the relation of the "School System and the City." In the spirit of the SCHOOL BOARD JOURNAL we shall look back over the half century to see what has been happening in this relation, as a basis for looking forward to see what may happen in the next half century.

The problem of this paper is not merely the question of governmental structure, the relation of the school board to the city council, the powers of the city superintendent of schools, the relation of school board and state government. It is, in short, not the legal or government problem that is to be our main concern but the social problem: the relation of the school system to the community of people whose agent it is, and who support it. In the terminology of the day, which Dewey popularized, it is the relation of the school and society in the city.

## I. Conditions of City and School Administration Fifty Years Ago

What was the picture in 1890? Let us look first at both sides of the picture. What was the condition in American cities about the time the SCHOOL BOARD JOURNAL was established? What was the situation with reference to school administration at the time? But first as to the city.

City government was at a low ebb. It was very "bad" government. The government was largely routine, political. The possibilities of the city as an instrument of public welfare were hardly conceived. The protest was to result in commission and city manager government in a few years, but these were to secure merely honest government; even the city manager plan, when adopted, was to concern itself primarily with a public-works program rather than with a social-welfare program.

One can understand the clamor of school people for the legal and financial independence of the city school district which was very strong fifty years ago and is today not quite so strong. It was a social reason. It was the character of the city governments in those days. The situation in city government as viewed by contemporary students of government was well expressed by James Boyce in *The American Commonwealth* when he wrote: "There is no denying that the government of cities is the one conspicuous failure in the United States." And in the *Contemporary Review* (Nov., 1911) he said: "The government of cities is admitted to be the blackest spot in American Politics." A few months before the SCHOOL BOARD JOURNAL was begun, Andrew D. White wrote "without the slightest exaggeration we may assert that, with very few exceptions, the city governments of the United States are the worst in Christendom—the most expensive, the most inefficient, the most corrupt. No one who has any considerable knowledge of our own countries and other countries can deny this."<sup>3</sup> While that reason was very strong in the days when Lincoln Steffens wrote the *Shame of the Cities*, conditions improved very greatly in later years. Even though Howe wrote a book on *The*

*City, the Hope of Democracy*, this was at the time an expression of hope rather than a statement of the facts. John Purroy Mitchell in New York, and Rudolph Blankenburg in Philadelphia, were to be the symbols of a new day for city government. While conditions in many cities are still very poor, the political corruption or venality of cities has always been, in print at least, the basis for the cry for the independence of the school district. While one can understand this desire to keep away from temptation, it must be remembered that it was the same public who was supporting the schools and supporting the city government, and it was the same kind of public opinion that was backing the school board as well as backing the general city administration.

School boards everywhere were putting away at the problem. They were concerned with running the educational machine. Politics was the main problem—politics in the school system itself and external pressure from the city-hall politicians for appointments, site purchases, and janitorial patronage. Ward appointments and local trustees were still numerous. There were no trained school administrators. There were some evanescent journals dealing with pedagogy. Payne had published a book on *School Supervision* in 1875, and Pickard had summarized his experiences of twenty years as teacher and superintendent in a book of 148 pages. Chancellor's two textbooks (*Our Schools: Their Administration and Supervision*, and *Our Schools: Their Direction and Management*) rich with the experience of a virile personality, were published later—in 1904 and 1908. Real impetus to the study of school administration was given in Snedden and Dutton's more objective and analytical *Administration of Public Education in the United States*, published in 1908, and which became widely used in the recently established college courses in school administration. Special studies began to appear around 1910, and surveys with progressively widening techniques, together with professional school reports, furnished more and more data for the scientific study of school administration. External surveys by experts or practitioners were soon followed by self-surveys, and then by continuing surveys as a regular part of the administration of city school systems.

## II. The Nation, the State, and Local Administration of Schools

At the basis of this discussion of the relation of the schools and city is the fundamental postulate of American school law that education is a state function. Even in 1890 this principle was clearly established as was shown in Andrew Draper's book on *American Education*, published in 1909 and expressing the attitude of the period. The important question was whether the state would make the city government itself the agent of the state, or whether it would make an independent school board its agent.

Beginning about 1910, there was a very serious effort to bring the Federal Government into the sphere of elementary and secondary education not merely by furnishing financial aid but by using the financial aid as a method of control. There has been since that time a revulsion against this tendency which is, at the present time, at a lower ebb.<sup>4</sup> This is a side issue that need not be discussed except to say that, generally speaking, the more nearly the control of the actual processes of education are in the local area, the better the quality of education is likely to be: recognizing the sound condition that the state, guaranteeing to all its children an education, may lay down the conditions of the development.

City, county, and other school districts of varying forms and jurisdiction are the agents of the state in furnishing education to the children of the state. They have in themselves no inherent

<sup>1</sup>President, Mount Mary College, Milwaukee, Wis.

<sup>2</sup>Mr. Bruce, in his autobiography, *I Was Born in America* (p. 92), tells of his launching the Journal on March 1, 1891. "a somewhat meager affair." "with a smattering of board-of-education doings and a portrait of a school official." Mr. Bruce's friends had gotten him one of the two ward appointments to the school board in the Fifth Ward of the city of Milwaukee. The Alderman nominated him and the council approved. He wanted to do a good job. He sought—what must be surely available, he thought—books and publications which would be helpful to him, in this important public service. He found nothing, because nothing existed, and in his failure was born the AMERICAN SCHOOL BOARD JOURNAL. What has happened in fifty years this edition of the JOURNAL seeks to make clear.

<sup>3</sup>*The Forum*, Dec., 1890, p. 111.

<sup>4</sup>Cf. Keith and Bagley's *Nation and the Schools* (Macmillan, 1920) and the Report of the National Advisory Committee on Education, "Federal Relations to Education" (1931).



power; all the power has been delegated. In our special concern, the city school district, which is usually coterminous with the area of the city, the main issue has been the independence of the school district or school board from control by the common council or board of estimates, or other political body. The issue has been political and fiscal independence.

Practically, it has been a negative problem of keeping the ordinary political authorities from interfering in the administration of the schools. This, of course, goes also for the fundamental problem of the power of the local school board to tax in its own name. It has always been felt that some kind of relationship between the general school board and the municipal administration should exist, and where independence was recognized there was often given to the school board power to tax on a mill basis up to a certain amount, and for anything over that amount the schools had to ask the common council. This issue has not been definitely settled as yet.

Only a month or two ago in the official organ of the U. S. Office of Education,<sup>5</sup> there was a discussion on the problem between Mr. Willard Givens of the N.E.A. and Professor Jerome G. Kerwin of the University of Chicago.

Mr. Givens says that the "prevailing policy has been to separate the administration of education from local government. Those who would change it are those who desire partisan control of appointments in the school system and 'pressure groups organized to reduce taxes.'" However, some able and sincere students of government desire the change, but "wise public policy demands the retention of the separate control of public schools." No convincing evidence has come to Mr. Givens' attention, he says (and everyone must admit that) against his position. He adds that investigators (unnamed and uncited) support the traditional separation of education and other government.

Mr. Givens says everyone will agree that our schools can serve our society best if kept free from partisan policies, partisan interference would be disastrous. Schoolwork transcends partisan considerations and the knockout blow is: "Science knows nothing of republican chemistry, democratic astronomy, or socialistic physiology." I wonder what public health, public safety, public works knows of democracy, republicanism, and socialism.

"The culminating argument," Mr. Givens concludes, "in favor of a separate school board rests on the unique function of education in American democracy." A strange sentence is found at the end of this paragraph. "The school cannot carry out this function if it is subordinate to any of the units which it must fearlessly and impartially evaluate." I take it that means the elementary schools and the secondary schools! For this reason the schools must be freed from all institutional controls other than the will of the people.

The argument against the traditional independence of school boards as Professor Kerwin formulates it, is based on simplification of our complex urban government, that the importance of education does not warrant a separate administrative structure as against the unity of municipal life and the integration of municipal administration. Independence has resulted in duplication of functions, added cost, complexity of structure and irresponsibility. "The school board," says Mr. Kerwin, "is the last vestige of this era of governmental chaos." Independent boards are not always good (witness Los Angeles) and dependent boards are not always bad (witness San Francisco). There is a venal school politics, too. Corruption is as likely to be found in an independent as in a dependent system. Independence defeats rather than aids popular control.

This is at any rate the latest form of the argument for and against the independent school board on traditional grounds.

### III. The Dominant Position of the State in Education

The merely legal question or the purely "political" question is not, we repeat the fundamental aspect in this problem. The real issue is the whole relationship of education to the community — the question of the relationship of school and society.

There have been a number of significant discussions of the re-

lation of the city and the schools that should be brought together for a broader, if not a new conception of this relationship in school administration. Even when the cities were a "disgrace," and the school administration was undeveloped as a science, there were men in charge of schools — men like Andrew S. Draper in New York State, William H. Maxwell in Brooklyn and later in Greater New York, and William T. Harris in St. Louis, as well as Ella Flagg Young in Chicago, Dr. William L. Ettinger in New York — who were virile men (and women) and competent administrators, and who were building sound practices on the job and enunciating sound principles in their reports and speeches.

But in those days schools were schools, and the main concern, to use the language of the Committee of Fifteen of the N.E.A., was: "The affairs of the school should not be mixed up with partisan contests or municipal business." The great concern then was not with the sociological aspects of education but with the legal aspects of education. Draper, who had come into education with legal training, summarized in a volume on American Education (1909) the twenty-five years' experience during which he had been charged with the oversight of the schools of a city of considerable size, with the direction of one of the tax-supported state universities of the country, and finally, with the supervision and control of the educational activities of an entire commonwealth.

Draper affirmed in his book the correct principle of the central place, the major legal responsibility of the state in the American system of education. All powers exercised by cities, counties, towns, school districts, and other local or municipal agencies, are delegated responsibilities. "It is expressly declared that, while the schools are not national, neither are they local institutions. Rather they are state institutions, maintained and controlled by the state that they may contribute to its greatness and the happiness of all the people by assuring an education to everyone."<sup>7</sup> The relation of the agencies of the state — for educational administration — to the other local agencies of the state for other purposes, safety, health, etc., is thus stated by Draper:

Upon principle, and as the result of experience, the state is bound to give the school system independent autonomy. There is nothing in the written law to prevent the law makers of the state from using the board of aldermen to administer so much of the state educational system as relates to a given city, but there is no lack of reasons against it. The reasons against a mixed system of administration are no less cogent than against school administration by the board of aldermen exclusively.<sup>8</sup>

And the relationship is stated in more detail in these words:

It does not leave the matter to the uncertain care of local communities. By a wise policy of local administration, in full accord with our American self-governing way of doing public business, it leaves certain matters to the qualified electors, or officers chosen by them, in each city or district, and thus it educates the people to self-government, and ordinarily produces schools best suited to the needs of each locality. But it leaves no more of this power to each locality than experience shows it may with safety, and not hazard its general policy to maintain schools in character with its general system, free and accessible to all the people. It encourages each locality to raise local moneys for school purposes, but through state funds, it makes sure that schools of its own creation and subject to its own management shall dot the face of its entire territory, whether they are enlarged and improved by additional local taxation or not.<sup>9</sup>

It is clearly accepted today as a matter of public law that education is a state function, and that powers exercised by local agencies are distinctly delegated powers. It is today certainly accepted generally, if not universally, by professional educators that the local board of education should be legally, and this means especially financially, independent of the city government. That this opinion is not always accepted today is indicated by the recent Givens-Kerwin debate. That it was not universally accepted by educators at the beginning of our period is indicated by a statement of Dr. Edward C. Elliott.

There is growing today, though, a new conception of the place and function of education within the organic life of the municipality. The central notion of this later concept is that of the unification of the various

<sup>5</sup>Later U. S. Commissioner of Education.

<sup>7</sup>American Education, 1909, New York, p. 53.

Recently quoted, too, by Graves in his *Administration of American Education*, p. 527. Commissioner Graves himself says on this same page (p. 592): "Education is too important a function to be kept to the vagaries, parsimony, or petty politics of the local community."

<sup>8</sup>Op. cit., p. 43.

<sup>9</sup>Op. cit., pp. 52, 53.

<sup>6</sup>School Life, November, 1939, pp. 48 and 49.

forces which go to make up the municipal life, and of the elimination of those forces tending to disintegrate the essential elements of the wholeness of the community life. This thought of unity, is, as yet, in the nature of an ideal. Prevailing political methods, traditional prejudices, and social inertness must be overcome and a keen sense of civic obligation developed before this unity can be realized. The doctrine which says that, "one of the chief dangers which menaces the security of our citizenship and the high purposes of the American state, in my judgment, is the mingling of municipal and educational functions," or that "while the state must accomplish its work for education largely through municipal agents, it must also prevent, so far as possible, any mixing of local politics with educational interests. To this end the development of education must be made as independent as possible of other departments of municipal government," must cease to be a working principle if our modern city life is to attain that efficiency demanded and desirable for real social progress.

Education, although primarily of state concern, is none the less a municipal responsibility, the complete realization of which will come only when it has been assigned its proper place within the scope of the whole municipal life.<sup>10</sup>

#### IV. The Social Forces Playing on the School

The legal and financial independence of the school board from the city council in the conditions that have existed in American cities has been a good thing. It should not be forgotten, however, that so-called independent school boards have shown all the venality, corruption, and incompetence that "political boards" show. In the last analysis, both the city government and the school board are, of course, the expressions of the political capacity of the identical people, and supported by the same taxpayers.

The financial or legal independence of the school board is an organization problem. It is a structural problem, not a functional problem. In all probability, it furnishes under contemporary conditions or ideas, a better basic condition for the real problem. If school boards really accepted their responsibility and critically reviewed the policies and proposals of city superintendents, and did not become rubber stamps for the superintendent, their financial and legal independence would be more generally a good thing. Conditions can be even worse than where there are school-board "rubber stamps." This is so, when a superintendent supinely becomes a rubber stamp for the president of the school board, or its most powerful member. There is no doubt of the fact that, if policies and plans have to be reviewed by common councils with the attendant publicity, then these educational policies and plans should receive greater consideration than they do by superintendents and school boards where such review is not required.

The larger problem — a real problem in the educational sense — is the whole complex of relations not of the school board, but of the educational process itself, to the community of which it is a part and which it serves. The machinery of education is significant only to the extent that it actually affects the educational process in the lives of the individual children. After all, financial and legal independence is negative. It means that the organized government of the community cannot, or perhaps should not, *formally* interfere in the management of schools.

The positive fact is that all kinds of social forces are actually exerting pressure on the public schools. The school does not exist in a vacuum, it is at the vortex of social forces. The agents or representatives or members of organizations such as the following are continually impinging on the schools: women's clubs, labor unions, chambers of commerce, the churches, the newspapers, teachers' organizations, public utilities, and other business organizations.

We have known of these influences, but until Counts published his significant study of the School and Society in Chicago, we had no concrete description of the extent and form of these pressures. We needed to see these pressures in a period of great social tension to drive home what ought to have been an obvious fact and lesson, but was not. The amazing play of social forces on the school reveals conditions "never dreamt of" in our simple description of financial and legal independence. The social situation described by Counts, may result, as he suggested, in "some loss of faith in these institutions (the public schools) as a great constructive and liberating instrument, but such a loss of faith may mark a distinct advance once the smug complacency with which students of edu-

cation have ignored *the social medium* in which the school must perform its task."<sup>11</sup>

The inadequacy of the traditional view of school administrators and textbook writers themselves, and of the social arrangements for the control of American public education, is clearly revealed in Counts' statement of the conclusion of his study:

But the proposals advanced thus far seem to reflect an inadequate grasp of the question. They appear to imply that the major task before us is that of insulating the school from corrupt political influences. This may be the negative aspect of the task, but the present survey of the Chicago situation shows that the problem strikes much deeper. One of the most disconcerting conclusions emerging from a firsthand study of the schools in this city is the conviction that the great body of persons, regardless of the side on which they fight, are entirely honest and sincere. Some of the forces which play upon the schools are selfish, dishonest, and corrupt, but to assume that the question is merely a moral question is grievously to misread the facts. If the willfully vicious factor were ruled out entirely, the situation would be simplified but little. The competitive struggles of group, sect, race, class, and occupation, as well as the indifference and ignorance of great numbers of citizens, would still remain.<sup>12</sup>

And even more trenchantly doing not lip service to American democracy, but facing directly the facts and tradition of American life, he says:

Moreover, unless the term *politics* is to carry exclusively the invidious connotation of the subordination of the public interest to the personal fortunes of politicians, to say that politics should be kept out of schools is fatuous. It is worse. It is to admit that the impulses which created the American nation have spent themselves. Nothing could render public education more sterile than to remove from it the very forces which a century ago gave it the breath of life. When politics have become so evil that their touch defiles the school, then indeed have both school and society begun to decay. Such a condition means that the purposes of the social order have been achieved and that the future holds no promise. Therefore, rather than seek refuge in the cautious counsel of removing the school from politics, we should move forward under the assumption that the real business of politics is to provide the channels through which the living energies of society may flow into new forms and patterns. The great desideratum, as already stated, is to devise some means of making the school responsive to the more fundamental social realities and of enabling it at the same time to maintain an even keel amid the clash and roar of the contending elements.<sup>13</sup>

#### V. The Delusions of Centralization

This whole problem is raised in a surprising form in the remarkable report on the *Social Services and the Schools* (1939) of the Educational Policies Commission of the N.E.A. The two fruitful ways to regard the social services in their educational aspects are from the standpoints (1) of the child to be educated and (2) of the society to be served. Neither of these points of view is controlling, but the point of view that is controlling is that of social mechanism, more particularly the unification of governmental agencies. This is a sterile point of view. It seems more a desire for power than the creation of a more effective instrument of the social purpose in making a better society.

The main thesis of the report may be stated in the language of the "Declaration of Policy":

That school boards become public education authorities with a viewpoint broad enough to encompass all public educational activities, both in and out of school.

That public educational authorities be charged with full powers and full responsibility for the conduct of all public educational activities within the community.

That the administration of public school, public library, and public recreation services be ultimately unified under the public education authority.<sup>14</sup>

These, it may be noted, are not conclusions growing out of the study. They are ideas imposed on the data. We read the data of confusion, traditionalism, and opportunism in the social services in the light of this unifying idea. There is some feeling and some formulation in the report that the present agencies have developed without plan, but if you will, in response to social need. Now let us co-ordinate them, say the school people (i.e., the authors of the report), and let us take them all under *our* wing, particularly the library and the recreational agencies. It would be too inexpedient now to consider the health and welfare agencies, but in these fields let us extend our program. Let us say a good word

<sup>10</sup>Elliott, Edward C., "Fiscal Aspects of Public Education," *Teachers College Record*, November, 1905, Vol. VI, p. 11.

<sup>11</sup>*School and Society in Chicago*, pp. 16, 17.

<sup>12</sup>*Op. cit.*, pp. 352, 353.

<sup>13</sup>*Op. cit.*, pp. 353, 354.

<sup>14</sup>*Social Services and the Schools*, pp. X, XI.



— a strong word — for the home, and the private agencies, but let us be concerned principally with the "overshadowing" (p. 2) and expanding governmental services. It is of no importance, for example, to say that "the work being done by private educational and social work agencies must be given *full* consideration" (p. 16) and then give them practically no consideration in the report. It is poor planning and co-ordination to make two fine, vigorous statements on the home (pp. 103 and 113) but to neglect it in the actual program. There are many modifications and limitations of the new proposed "public educational authority" suggested in the report, but an absolute control of the social services is "ultimately" envisioned.

The real way "to do the job" is not the slow way of transition — though this may be necessary — but "to wipe the slate clean":

The creation of new and specialized services in response to urgent needs has not been conducive to perfect articulation of effort; neglected areas, overlapping responsibilities, and duplicated services are to be found in many places. Imperfections in the social service structure are inevitable where developments have been graced with but little, if any, comprehensive planning. One means of clearing up such inarticulations would be to wipe the slate clean and establish *de nouveau* the whole system of governmental social services. This, of course, is seldom possible; reorganization and co-ordination must ordinarily be effected from time to time by joint efforts within the community.

No particular agency has any vested right in the functions or property which it administers for the public. New circumstances may require that an agency assume new functions within its proper sphere or may make it necessary to reallocate or even to eliminate part or all of a service. In this process, research, planning, and community education are required.<sup>15</sup>

In the relation that we are now considering, this report with its strong insistence on planning and co-ordination and ultimate unification of the social services under a public educational authority, throws a new light on the problem of the city and the schools. Here, seemingly, we have a plea not for isolation or insulation or independence, but for power and authority and control. Does not the argument go too far, for the traditional point of view? If there is to be so much unification, why not complete unification under the city government? An alert public that could keep a public educational authority with so much power responsive to public opinion, could keep a unified city government responsive, and could more intelligently make its taxes serve its social needs.

This is another manifestation of the "centralizing mania," the delusion of the mechanically minded. If you only put many things together, no matter how different their approach, as in this case to the culture of the community, no matter how different the spirit of each, no matter how essentially different in actual content — so long, in short, as you can "lump" them together under the heading of education, and put this congerie of social services under a single head, you have done — what? You are just as likely to get bureaucracy, red tape, uniformity, and standardization instead of diversity of effective service, and the stagnation of centralization instead of the vitality of decentralization. This is the delusion, too, of taking the chart of organization, the blueprint, for the organization itself. We, too, often assume that the unification of administration will guarantee a diversity of needed service. Experimentation is likely to be lost in the process, formality to take the place of informality and variations in the organization in response to need to be blotted out. The social areas that are involved in this discussion, including education, are relatively immature in development, and are in great need of social experimentation and social invention, not only through governmental agencies, but diffused in the population, and consequently decentralization is more likely to achieve the social purpose than centralization.

In any case, these proposals of the Educational Policies Commission are not likely to reinforce the case for the independent school board.

Dewey in another connection has put the sounder view, which if it had been adopted by the Commission would have transformed the report into a constructive document instead of what it is:

I do not believe that, at least for a long time to come, we can have a high degree of centralized authority in the way of educational bureaus in this country without their doing quite as many mischievous and harmful

things as good ones: — if, that is to say, they work along the older and more recognized lines of central control. The danger would be a lot of machinery for the sake of machinery, and multiplication of red tape, and mechanical uniformity. But there is a possibility of doing more than has been done, and doing it more systematically on the part of state and local departments of education, in ways which are congenial to the genius of our institutions. As almost everybody has been saying of late, a crucial question, for our democracy is whether we can develop and utilize experts. I do not think that for a long time to come, because of our national spirit and temper, we can develop experts in the sense of official administrative experts, experts who will do it for us, who will be a kind of providence over us. I think it is possible, however, to have a vision of another kind of expert service from the state; from the larger state; the federal Union; the smaller state, the State of New York, for example, and again from the local community. I think we can develop, for example, in New York state, a department of education which shall command the most expert educational capacity that there is in the whole state, and which shall put it at the disposal of every community that wants it, and of every community that needs it, whether it wants it or not.<sup>16</sup>

## VI. The Need for Rethinking the Problem

The whole problem of the school, the educators, and of the school administration must be reconsidered from an organic conception of the city. The desire for unity which the Educational Policies Commission is obviously seeking is expressed in terms of unification of governmental agencies, instead of in terms of the life-forming or life-destroying potentialities of city life. It is not unity of administration that is important, it is the unity of life that is the central thing, in accordance with Ruskin's dictum, "There is no wealth but life." It is a life of order and vitality, not the order of regimentation, of totalitarianism, or of statism which is death.

Instead of accepting the stale cult of death that the fascists have erected, as the proper crown for the servility and the brutality that are the pillars of their states, we must erect a cult of life: life in action, as the farmer or the mechanic knows it: life in expression, as the artist knows it: life as the lover feels it and the parent practices it: life as it is known to men of good will who meditate in the cloister, experiment in the laboratory, or plan intelligently in the factory or the government office.<sup>17</sup>

Legal power is undoubtedly vested in the state, but the vital power, life-giving power must be found in the city.

Lest you think we mean by the city an arbitrary area — a geographical fact — or a governmental machine — a political fact, consider Lewis Mumford's definition of the city:

The city, as one finds it in history, is the point of maximum concentration for the power and culture of a community. It is the place where the diffused rays of many separate beams of life fall into focus, with gains in both social effectiveness and significance. The city is the form and symbol of an integrated social relationship: it is the seat of the temple, the market, the hall of justice, the academy of learning. Here in the city the goods of civilization are multiplied and manifolded; here is where human experience is transformed into visible signs, symbols, patterns of conduct, systems of order. Here is where the issues of civilization are focused: here, too, ritual passes on occasion into the active drama of a fully differentiated and self-conscious society.<sup>18</sup>

The city as here conceived is a social emergent. The problems of a mere physical city were solved in the rectangular blocks, and higher buildings with receding upper stories, and relations of height of buildings to width of streets, and similar physical corrections involved in what has been called city planning. Thus was congestion solved, it was thought, by even more congestion. Then political honesty of officials and business administration was to solve political corruption. This was the "new order," but its makers failed to appreciate that this new congested city made clearer the need for a genuine social integration. In the slums, the ghettos, the tenements, and even the apartments, evils of all kind spread more rapidly and more certainly. Mumford well says: "As the pace of urbanization increased, the circle of devastation widened."<sup>19</sup> Victor Branford has summarized this phase in a fine paragraph:

Emerging in a utilitarian era, the civilization of America necessarily displayed the qualities and defects of its age. It exhibited them with characteristic energy, not to say exaggeration of effect. The separation of art and industry, of intellect and social life, of business and morals or religion,

<sup>15</sup>John Dewey, *Organization in American Education*, Teachers College Record, March, 1916, pp. 635-37. For this and related quotations, see Fitzpatrick's *Readings on the Philosophy of Education* (Century), pp. 728-59.

<sup>16</sup>Mumford, *Culture of Cities*, p. 11.

<sup>17</sup>*Op. cit.*, p. 3.

<sup>18</sup>*Op. cit.*, p. 8.

<sup>19</sup>*Op. cit.*, p. 105.

which has devastated Europe since the Industrial Revolution, has yielded in America an even more unrelenting and predictable supply, organized on the most correct commercial principles, and poured out in prodigious quantities, of the ugly and the useless, the morbid and the confused, the sordid and the futile. Now, some unification of its characteristic thought and activities, its common feelings and aspirations, is insistently demanded by human nature, and is invariably realized by the half instinctive effort of human solidarity. Where then is this to be found? This unintermittent American flow of ugly industry and vapid art, of confused thought and morbid life, of sordid business and arrested morals—this ever-extending progress and unison of all that is futuristic—is not its typical conglomerate the up-to-date American city itself—Pittsburgh or Chicago, Winnipeg or Vancouver?<sup>20</sup>

And more concretely he points out elsewhere that the civilization of a time expresses itself in the "living city." And he finds evidences of the inadequacy of the city in its social responsibilities, "its waste of energies, human and mechanical, in its misdirection of talent and repression of genius, in its vulgarization of adventure and debasement of initiative." And more concretely he asks, "What use could London find for Francis Thompson, 'finest of later Victorian poets', a cab-runner! And what could Christina do for the mathematician Abel—a man whom Lord Kelvin thought could have solved many of the problems of applied mathematics upon which invention waits? It allowed him to die of starvation and neglect and a broken heart. This has always seemed to me the tragic waste of modern life and of modern education—the waste of human capacity." And Dewey has a trenchant sentence especially relevant to our general thesis:

Now the third (essay) deals with the school itself as an institution, in relation both to society and to its own members—the children. It deals with the question of organization, because all waste is the result of lack of it, the motive lying behind organization being promotion of economy and efficiency. This question is not one of the wastes of money or the waste of things. These matters count; but the primary waste is that of human life, the life of the children while they are at school, and afterward because of inadequate and perverted preparation.<sup>21</sup>

And let me for its more general significance add: "All waste is due to isolation. Organization is nothing but getting things into connection with one another, so that they work easily, flexibly, and fully."<sup>22</sup>

## VII. A Reconstruction of School Administration

The main trouble with the thinking on this subject is that it concerns itself with stereotypes—or perhaps it was not thinking at all. It has two main counters in its game: administrative centralization and independence, or should we not say, isolation from the city government. Its conception of the city government was that it was "political," and as such was bad—an "untouchable"; its conception of the city was that it was a more or less artificial geographical fact. It lost sight of the people of the city, and it had no vision of what a city might be—but more significant than either it had no adequate conception of education as a social process. It is our proposal here that instead of being concerned primarily with control and power through administrative agency, we must understand the nature of city, the possibility of its evolution or transformation to new forms, the part it must play in the educational process, and in the light of these facts, conditions or values consider the administrative mechanisms and relations. To put it in another way: The problem immediately ahead is to orient school administration—and education itself—to the inspired vision, penetrating insight and creative possibilities of what is called regionalism as explained by Lewis Mumford, Victor Branford, and Patrick Geddes.

The city or the city government is not a leprous thing infecting all that touches it by its political germs. It is not something to be run away from or to escape from. The real task of this "politics" that seems so evil, is in Lewis Mumford's words the reanimation and rebuilding of regions as deliberate works of collective art. "It raises," he continues, "anew in a form that now has fuller human significance the fundamental questions of human inter-relationship across the ethnic, ideological, and cultural boundaries that have been carried over from the past."<sup>23</sup> It is this cultural

reconstitution and regional integration that is the task of *politics*.

And elsewhere as Geddes and Branford had indicated before him, Mumford points out that the city is the educational means, and the school is the community in its cultural aspect. He says: "under the new biotechnic economy, the city becomes again, as it has often been in the past, the chief instrument of education; the wider school of the young and the university of the adult; whilst the factory, the meeting hall, the political committee, the scientific society become, as it were, *auxiliaries* of the school. And under such conditions an important result must follow; the processes and activities of the school will tend to set a mold for the social processes as a whole."<sup>24</sup> The divorce of the city and its educational instrumentalities is tragic both for city and for school. In another connection Branford has pointed out similar tragic effects of the separation of the university from the city. The immediate loss on the lower levels is more significant for the child than the city; his education lacks vitality, vividness, and reality. On the higher levels the source of a vivifying and enlarging culture is lost.<sup>25</sup>

In the process of bringing into existence such a city there are four steps:

1. Survey, exploration for the discovery of the data.
2. Evaluation of the data, of the needs, and activities in terms of social ideals and purposes.
3. Imagination, reconstruction, and projecting the plan properly.
4. Transformation into being—which implies the re-education of the group.

In bringing about this transformation from the confused, congested city to the orderly regional integration for the good life, present thinking about school administration, on the actual processes of education are a hindrance.

In the second stage where educators might help, the present conception of independence or isolation, and the preoccupation with administrative centralization will hinder what is needed.

Social and spiritual values must harmonize with actuality but they do not necessarily grow out of the present situation which in most cases, including the school administration is correctly speaking, pathological. To formulate these social values and purposes, we need the geographer, the sociologist, the engineer, the philosopher, the theologian, the educator, and the artist, but more than all of these we need the people, who unless values express their aspiration, and become part of their outlook on life and their social creed through a communal process, if not a school process, then the plan will not have that support and function which is of its essence.

Unless this succession of steps for the survey of the present city through evaluation and imaginative reconstruction to transformation to the "cultural" city happens, the educational administration cannot achieve the educational purpose, and the "good life" cannot be achieved for its population. What the transformation in the school that must be achieved is, let the regional planner, architect, and sociologist Mumford tell the educators. He said:

From the drill school to the organic school: from the child school to the child-adult school: from a desiccated environment to a living environment: from closed issues and mechanical indoctrination to open inquiry and cooperative discipline as a normal process of living: that is one series of steps. From the part-time school, confined to a *building*, to the full-time school taking stock of and taking part in the whole life of the neighborhood, the city, the region: from an education whose truths and values are in good part denied by the actual environment and the social practice of the community to an education that is integral with the demands and possibilities of life and that shirks no needed effort to make over reality in conformity with purpose and ideal: here is another series of steps that mark the path of modern education.<sup>26</sup>

This transformation of the school is essentially an expression of the whole communal life. The civic principle is that to believe the doctrine one must live the life. In the beginning we must face

(Concluded on page 110)

<sup>20</sup>*Interpretations and Forecasts*, p. 326.

<sup>21</sup>Dewey, *School and Society*, p. 59.

<sup>22</sup>*Op. cit.*, p. 60.

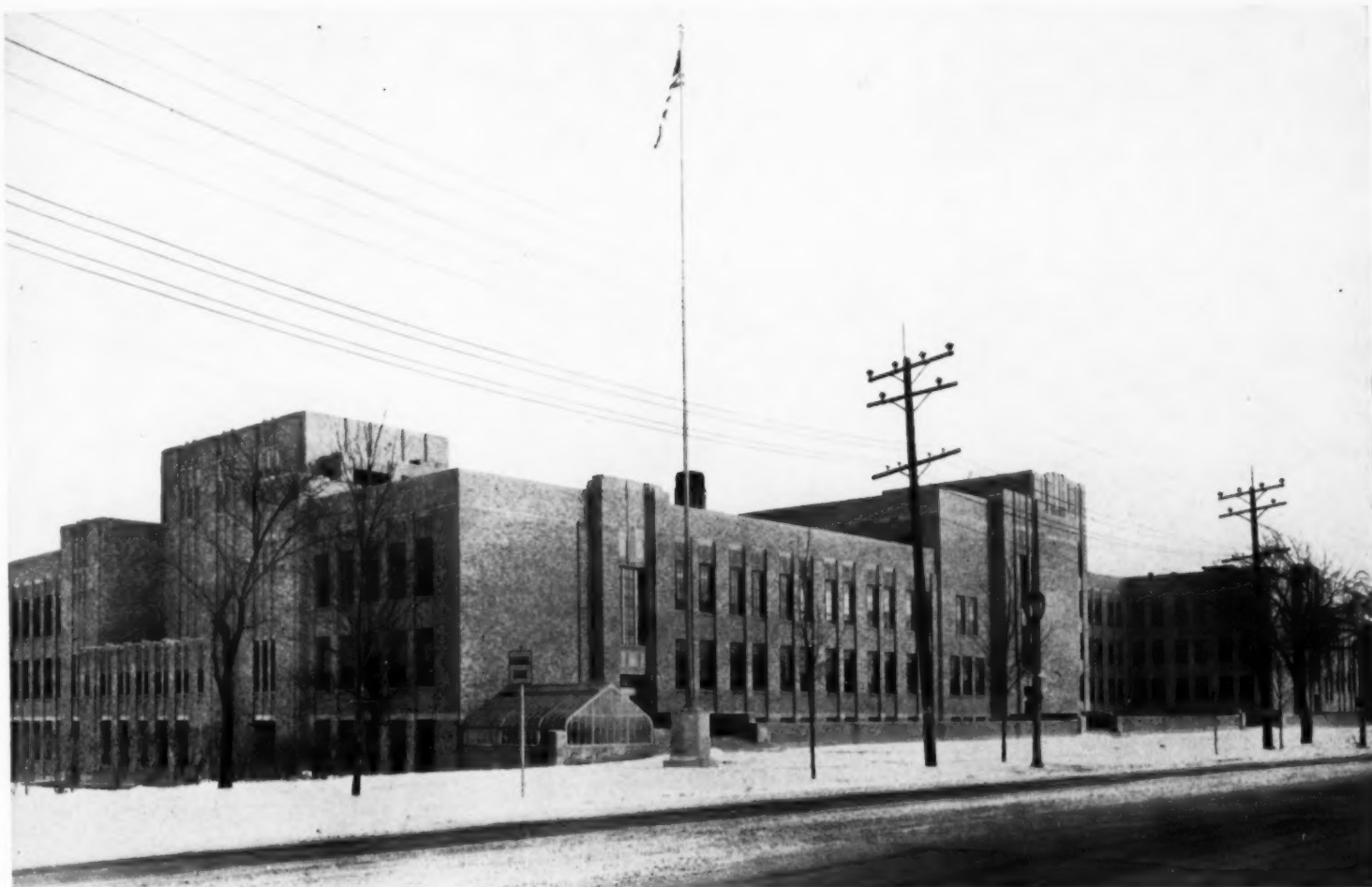
<sup>23</sup>Mumford, *op. cit.*, p. 348.

<sup>24</sup>*Ibid.*, p. 474.

<sup>25</sup>Branford's words (*Interpretations and Forecasts*, p. 90) are: "Lacking the vision of the university, the city becomes a breeding ground for all the tribes of charlatans from patent medicine men and palmists up to panacea-mongers, political, social, and religious. The university having lost its ancient vision of the city, in its own way suffers no less gravely, perhaps all the more, since its present and dominant ideal, that of becoming a well-endowed, moral vacuum, began to subjugate the imagination of the successful and retiring capitalist who feels his own time for expiratory masses is approaching."

<sup>26</sup>Mumford, *op. cit.*, p. 476.





*The Pulaski High School, Milwaukee, Wisconsin, as viewed from the southwest. Guy E. Wiley, Architect, Board of School Directors, Milwaukee, Wisconsin.*

## Pulaski High School, Milwaukee

G. E. Wiley<sup>1</sup>

Architecture is an expression of an age and as such it portrays life. It is produced by use of the materials and methods of its time to provide for the requirements of its time. Through the study of the remnants of its buildings, the life of past ages is revealed. "This is a machine age" has been often repeated. Uniformity, standardization, and mass production are modern watchwords of progress. In machine processes and in science the uncertainties of the human element are eliminated and the same elimination of human uncertainty and irregularity is spreading into modern architecture. A prominent characteristic of the best of modern architectural design, brought about by its machine production, is an honesty and forthrightness of character which makes it distinctive.

Milwaukee has just completed a new building for its twelfth high school—Pulaski. The use of new materials, modern simplicity of design, and the provisions for handling a great number of students in an expeditious manner have been dominating factors influencing the building's archi-

ture. It has been said that this building looks like a factory, not an ordinary factory to be sure, but nevertheless a factory. Why shouldn't it, many schools do. Some of the finest examples of modern architecture are industrial buildings. The closer architectural expression follows the requirements of educational procedure the more factorylike the buildings become.

The names of architectural styles are like the names of prehistoric animals, unknown to those who lived at the time. To name the architectural style of Pulaski School is impossible. To meet the feeling that it must be named, it can be said to be modern, but not "modernistic." The name *Pulaski* has a distinct place in American history. At the time of the American Revolution when the fortunes of the Colonies were near their lowest ebb, Benjamin Franklin met Casimir Pulaski in Paris. As a result, Pulaski, who was a distinguished Polish soldier, joined the armies of Washington. These facts are the theme of the incised carving on the jambs of the main entrance doorway. The figures of Washington and Franklin appear on one jamb and those of Lafayette and Pulaski on the

other. At secondary entrances the piers flanking the doorways terminate in partial figures typical of our Revolutionary period. While the building is very distinctly modern in treatment, the sculptural decoration of its doorways commemorate the man after whom the school is named and the Revolutionary period in our history.

Pulaski High School was built to accommodate 2,500 pupils. More can be accommodated, depending on the skill of the principal in program making, or, in other words, the mechanical perfection of its production line. A group of 2,500 or 3,000 pupils equal in number the entire population of a fair-sized town; or, using another comparison, this number is equal to the entire enrollment of four of Wisconsin's best small colleges. These 2,500 students are given a complete high-school education in one building and in some of our largest cities perhaps double this number are provided for in one building. Is it any wonder that an educational mass-production line is required in our city schools and that the buildings for these schools often have a factorylike architectural expression?

Much has been written recently about

<sup>1</sup>Architect, Architectural Division, Board of School Directors, Milwaukee, Wis.



*The front court and main entrance, Pulaski High School, Milwaukee, Wisconsin.*

changed modern requirements of education and the much greater change to be expected in the future. Hypothetical modern school plans have been developed by architects and published as forecasts of the schools to come. These schemes have value as stimulants to the imagination, but sound progress is made through day-by-day growth and not by a sudden overnight revolution. While a marked change in education and its buildings might be noticeable after a period of a score or more of years, there is little change apparent building by building as built to meet the educational needs of a growing city. School buildings serve the educative processes carried on within them; they are a means to an end and not an end in themselves.

The first step in planning a school building is the formulation of its program of educational requirements. In a large city school system this program is based on past experience in the previous city schools and also on what this experience indicates as the probable development in the future. The program for the Pulaski High School was based on the plan of the last previous high-school building, the Rufus King High School.<sup>2</sup> This building was carefully studied and the various suggestions for improvement were incorporated in the sketches for the Pulaski school. In addition to these changes, other changes were required by the conditions of the site; also, the board of school directors added a swimming pool. While Rufus King and Pulaski high schools do differ in some respects, they have the same type of plan. In structure, choice of materials, and details of construction and finish they are practically identical. Though Pulaski is a larger building than Rufus King and due to some differences in color and design, they do not look alike, they are twin buildings.

Besides being a machine age, this is also

<sup>2</sup>CL SCHOOL BOARD JOURNAL, January, 1935.



*The Pulaski High School, Milwaukee, Wisconsin, viewed from the southeast with the gymnasium and swimming pool wing in the foreground.*





*A general view of the library, Pulaski High School, Milwaukee, Wisconsin.*

an age of following the line of least resistance. Everything is now "streamlined." It all started with the airplane. That appealed to the popular imagination. It was a wonderful symbol of progress and achievement and soon the airplane's streamlining was adopted for everything, whether it fitted or not. We even have streamlined newspapers. The remainder of this article, which is devoted to those features of the Pulaski building believed to be the most interesting to the reader will be presented in the fewest possible words consistent with clarity arranged to be read with the least possible effort; i.e., "streamlined."

**THE SITE.** Twenty-two acres, in the southwest corner of a park, slopes to north, principal street on higher south side; building thus one story higher at north side, one complete story obtained below principal street-entrance level by use of area walls set well out from the building on south street front. See sketch 1.

**PLAN TYPE.** In four divisions; a three-story auditorium wing "with classrooms stuck around the edges" on the west (W); a three-story cafeteria and gymnasium wing and a two-story swimming-pool wing on the east (E); a one-story shop wing on the north (N); a

four-story classroom section in the center (C).

**GROUND DEVELOPMENT.** Landscaped to be consistent with its park location; full-size football practice field; one-quarter-mile running track; hard-surfaced ground for games and outdoor gymnasium work.

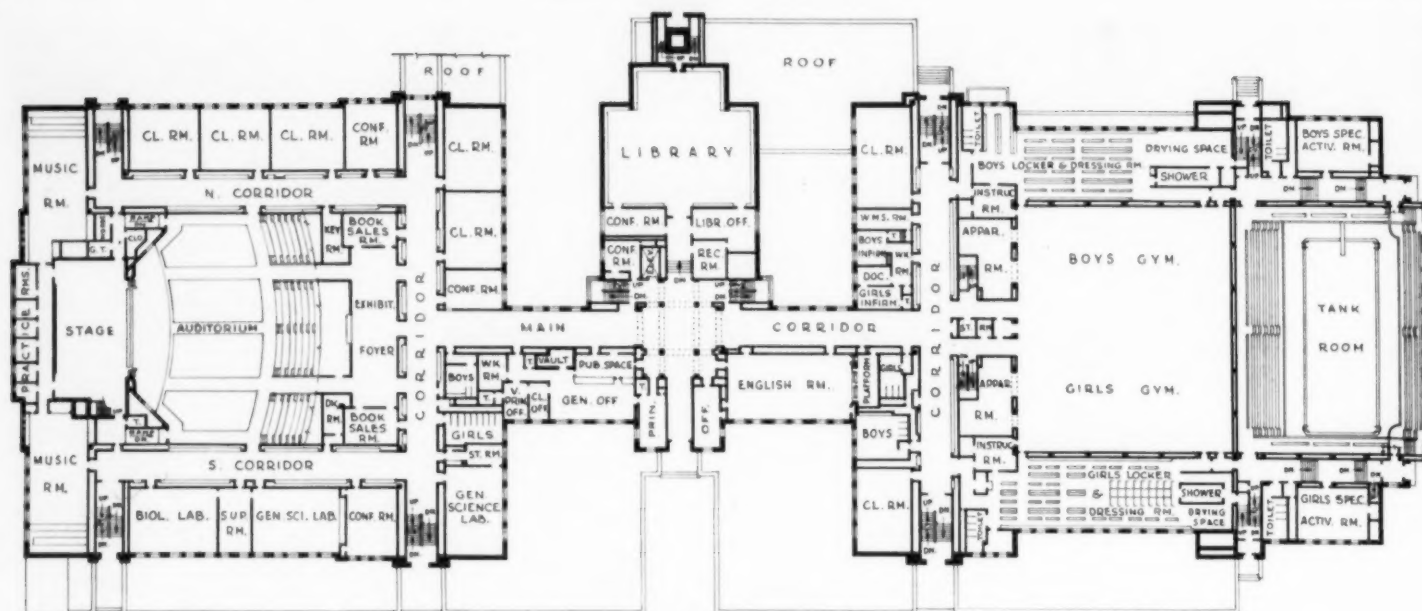
**BUILDING SERVICE.** General delivery services, coal delivery and ash removal screened from the park by the shop wing. The County Park Board insisted that all sides of the building be treated as "fronts." In particular, they did not want the rear of the building with the boiler house and service deliveries on the park drive.

**EXTERIOR CONSTRUCTION.** Steel skeleton frame; concrete foundation walls, fireproofing and floor slabs; 8-in. brick walls furred with 4-in. cinder-concrete tile; Indiana limestone trim and granite door sills and steps; cinder-concrete tile partitions; partitions between classrooms double steel stud for soundproofing; metal casement windows; skylights extruded aluminum; entrance doors and frames aluminum; glass-block windows in gymnasiums, locker rooms, swimming pool, and various other uses.

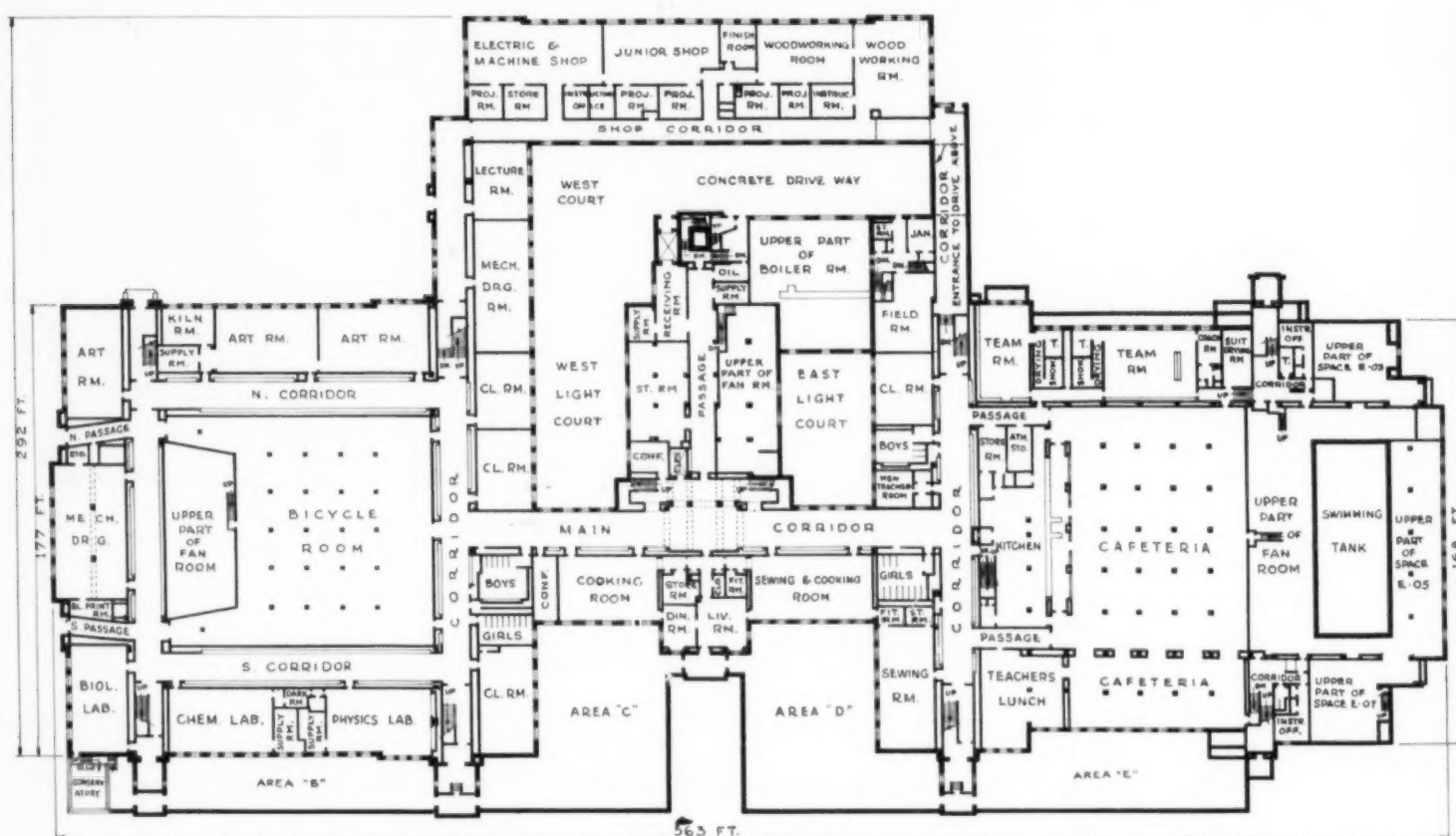
**ATTRACTIVENESS AND COLOR.** A prominent school superintendent says "The school need no longer be an ugly place, as so many of them are." His observation is true, but fortunately school designers are today giving

more thought to attractiveness and even beauty than at any previous period. Color has been more extensively used in this school than in other Milwaukee schools. Attractiveness can be more economically obtained in this way than in any other, but care will be required to see that in future maintenance painting, that all gained in this way is not lost in a flood of standard brown, buff, and cream. The main entrance lobby on the first floor, the library, and the foyer to the auditorium are the principal color areas, though the color used in classrooms contributes much to the general color effect.

**MAIN ENTRANCE LOBBY.** The entrances of many schools, carefully designed on the exterior, lead to blank corridor walls on the interior, and the visitor finds his way by reading the signs or asking the first person he meets—an anticlimax. In Pulaski the main entrance leads to an attractive and colorful lobby. The floor is of terrazzo in an interesting pattern of which the center of the design is a map of the western hemisphere. The walls are of buff Mankato stone with colorful decorative faience-tile panels symmetrically placed over the doorways on opposite sides. The subjects of these panels are episodes in the American Revolution. The base is red Levanto marble. On the right on entering, is the dramatic room which is suit-



FIRST FLOOR PLAN



GROUND FLOOR PLAN

*Floor Plans, Pulaski High School, Milwaukee, Wisconsin.—Guy E. Wiley, Architect  
for Board of School Directors.*

able as a meeting place for small groups of students or patrons of the school; on the left is the administration office suite. Directly opposite the entrance is the library. At the right and left of the library entrance are stairways to the upper and to lower floors and adjacent to one of these stairways is an elevator.

**THE LIBRARY.** Characteristics briefly stated: the floors are linoleum tile in brown and red; the woodwork consisting of shelving, catalog file, built in charging desk of special design, doors and trim generally is white oak, natural color, waxed; stone pilasters of a coffee-colored Colorado travertine; the base is verde antique marble; ceiling panels are

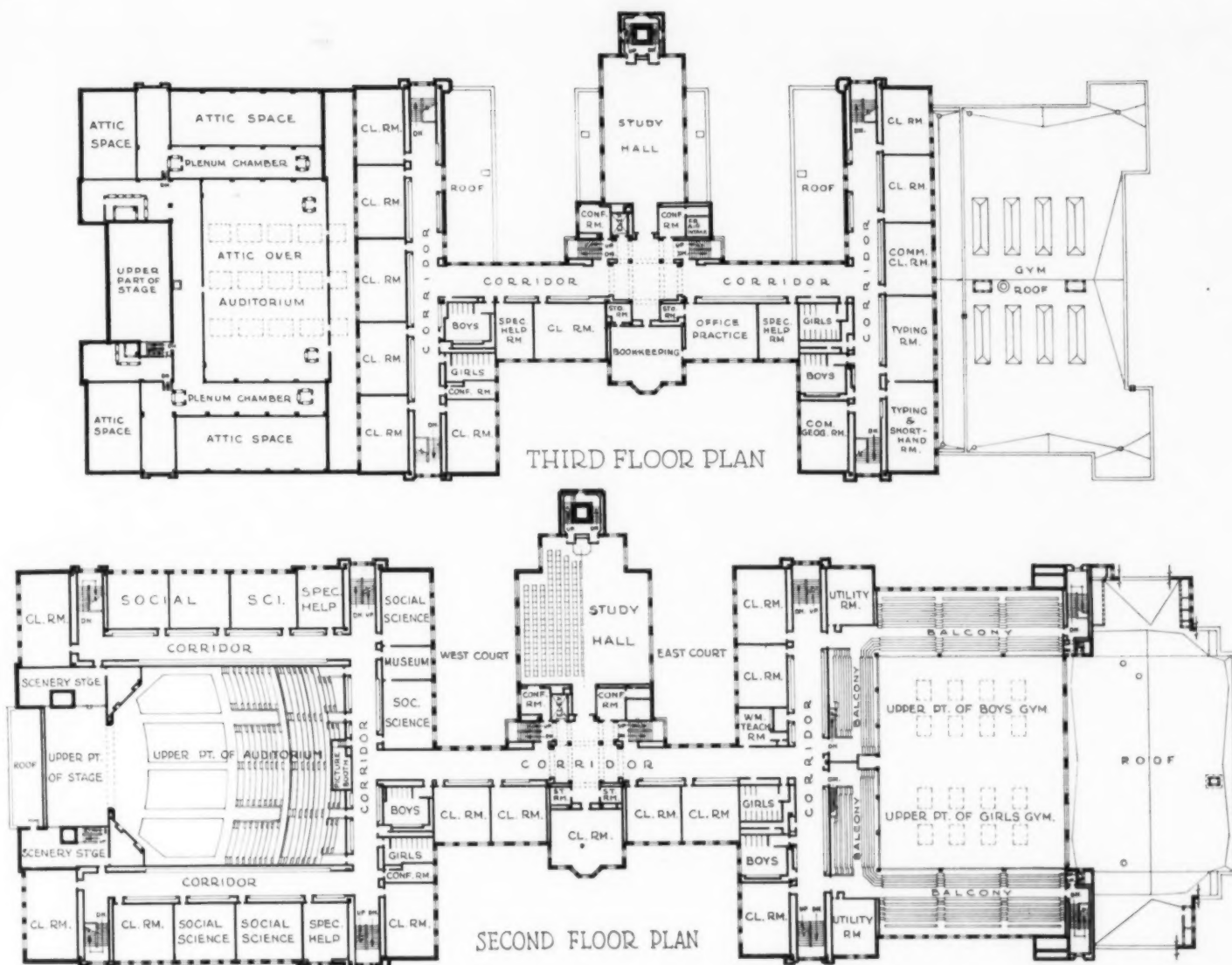
acoustical material; upper part of walls, ceiling beams, and cornices are painted plaster; decorative painting of ceiling beams includes decorative devices developed from historic and prominent modern printers' marks; lighting fixtures, standard glassware with special metalwork and controlled by an "electric eye." The lighting in the study halls in the two stories above the library are also electric-eye controlled.

**STAIRS.** The stairs are steel-framed steel-plate construction; strings and risers are stainless-steel covered; treads precast terrazzo with 6-in. safety tread of all-aluminum aggregate; newels, rails, and balustrades aluminum; balustrade panels filled with 3/4-in.

rough plate glass. *Note:* this glass was found to be in the same price class as Bakelite composition panels, used in the Rufus King School, and less expensive than marble. Glass panels have the advantage of transmission of light, thus eliminating the dinginess often caused by closed balustrades. See illustration.

**AUDITORIUM FOYER.** The space below the bleacher seating in the auditorium forms a foyer on the first floor. This relieves corridor congestion and provides space for bookstores and ticket office at the ends of the foyer. Its walls have a continuous band of cork carpet for use as an exhibition gallery, and lighting is provided for this purpose; a lighted display case is also provided; wainscot gray





*Floor Plans, Pulaski High School, Milwaukee, Wisconsin.—Guy E. Wiley, Architect for Board of School Directors.*

Mankato stone; base verde antique marble; floor two shades of green terrazzo with a pattern design in brass strips; ceiling acoustically treated.

**AUDITORIUM.** The auditorium is so placed that it is in the most convenient location for school use. In a large school in a large city school system the community use of the school auditorium is quite secondary to its school use. In Milwaukee, as in most cities, school buildings are available for community use on payment by the user of the additional cost of opening these buildings. Community use under this regulation is not frequent, and an obvious conclusion is that the demand for community use is for free use. Someone else (the taxpayer through school funds) is expected to pay the bills. In the Pulaski school gates are provided for shutting off the auditorium wing, but that is the only concession made to community use. In a suburban location, or a smaller city without other suitable halls available, the conditions in regard to community use would be very different.

It should be remembered that the 2,500 students of the school move on carefully planned schedules throughout the day. Those occupying the auditorium must leave in a very short period of time—about five minutes—and scatter to classes throughout the building. Corridors are planned on three sides of the auditorium, and exits are provided



*A typical laboratory.*



*The auditorium of the Pulaski High School, Milwaukee, Wisconsin, is a warmly colored, friendly room which has been planned primarily for the widest possible service to the school.*



*The swimming pool, Pulaski High School, Milwaukee, Wisconsin.*

at the front, sides, and on first and second floors at the rear. This arrangement in plan makes possible the movement of students out of the auditorium in the restricted time allowed.

The expense of building an auditorium large enough to seat the entire enrollment would be too great, hence the capacity is cut down to a little more than one half. A convocation of the entire student body can be arranged in the two gymnasiums thrown together.

The physical features of the auditorium are: 1,275 seats, floors under seats and stepping of bleacher section cement; lower aisles

terrazzo; acoustical material on side walls and small areas of ceiling (this distribution of acoustical material has proved to be very effective); metal grilles at each side of proscenium for speakers of future electric organ; grille over center of proscenium for speaker of broadcasting system, program bell and fire horn; radiation back of vertical grilles in side walls; ventilation by air supply through grilles in ceiling exhausted through grilles at floor on side walls and through grilles in risers of bleacher stepping; daylight and artificial light through skylights and ceiling sash; daylight controlled by motor-

operated darkening shades, and the artificial light controlled by dimmers on the stage switchboard.

**STAGE.** The stage is 30 ft. deep, 54 ft. wide; steel gridiron with working space above; stage height permits raising curtains and scenery full height; locking rail for counter-weight system on stage floor; storage space at second-floor level, hoist provided; space for future installation of a paint bridge and paint frame; floor is pine except narrow strip in front; walls unplastered; projection booth, stage and orchestra have telephone connection; complete stage switchboard; toilets; switchboard and all stage controls on right side of stage when facing proscenium. An effort has been made to avoid the type of stage referred to by Irving Pichel<sup>3</sup> when he said, "As often as not the design of the school stage has been a conspiracy to thwart its growth."

**MUSIC DEPARTMENT.** Planned in connection with the auditorium and stage; a music room 25 by 60 ft. on each side of stage connected by a secondary corridor back of stage; a series of small music practice rooms or dressing rooms on this corridor, thus accessible from music rooms or from stage; instrument storage cases recessed in music-room walls; at the rear of each music room there are 70 seats with tablet arms arranged on steps for chorus or lecture use; the level floor of the front of the room provides space for a band or orchestra; walls, ventilating system and corridor doors of music rooms sound-proofed.

The arrangement of the music department and its intimate correlation with the auditorium and stage have proved to be very satisfactory.

**LOCATION OF SPECIAL DEPARTMENTS.** All special departments which require services of water, gas, air, electricity, or special ventilating connections are located on the ground floor. Below this floor there is an accessible pipe space throughout, except below the bicycle room and cafeteria floors.

**SHOPS.** Shops also have an accessible space below the floor for connections to power machinery, forges, etc., as well as for duct space for the shop dust-and-shavings collection system. Floors wood blocks on end; walls unplastered, painted; shops generally equipped for classes of 40. Four shops are arranged in one long space 25 by 198 ft.; partitions glazed to 7 ft. high; wood ceiling above. Storerooms, toolrooms, and instructor's offices parallel the shops in a space 14 ft. wide; separate ventilating system for shop wing.

**CLASSROOMS.** Of various sizes; relation of blackboards, bulletin boards, cases, and trim studied to provide a unity of treatment consisting of a low painted dado, a continuous band at the blackboard position and a frieze above. Three colors used on walls, dado, blue green; painted plaster areas in blackboard band of strong color, maroon, deep blue, or jade green; lighter color in frieze above; ceilings light, such as cream or ivory; colors used vary in different rooms.

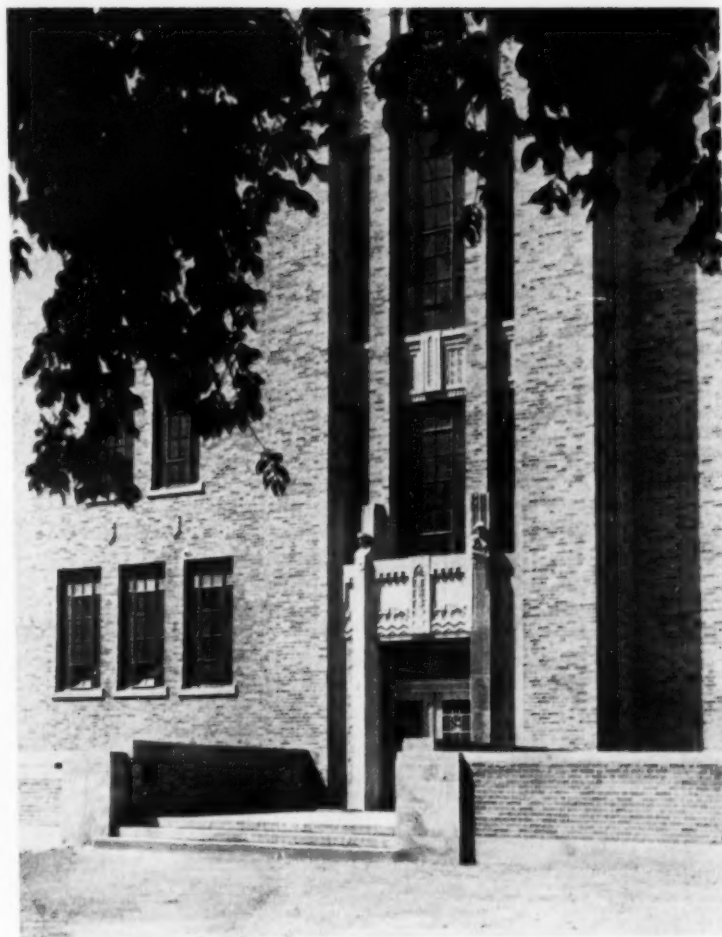
**DRAWING AND ART ROOMS.** Three rooms provided for art including drawing, painting, modeling, art crafts, hand-made tile and pottery; kiln room and supply room; floors linoleum; slate window shelves in all rooms; removable combination blackboard and bulletin boards in all rooms; slate wash sinks and shelves recessed in walls in each room.

<sup>3</sup>On Building a Theatre, by Irving Pichel, Theatre Arts, New York, 1920.





*A secondary entrance to the swimming pool and gymnasium wing.*



*A side entrance to classroom wing.*

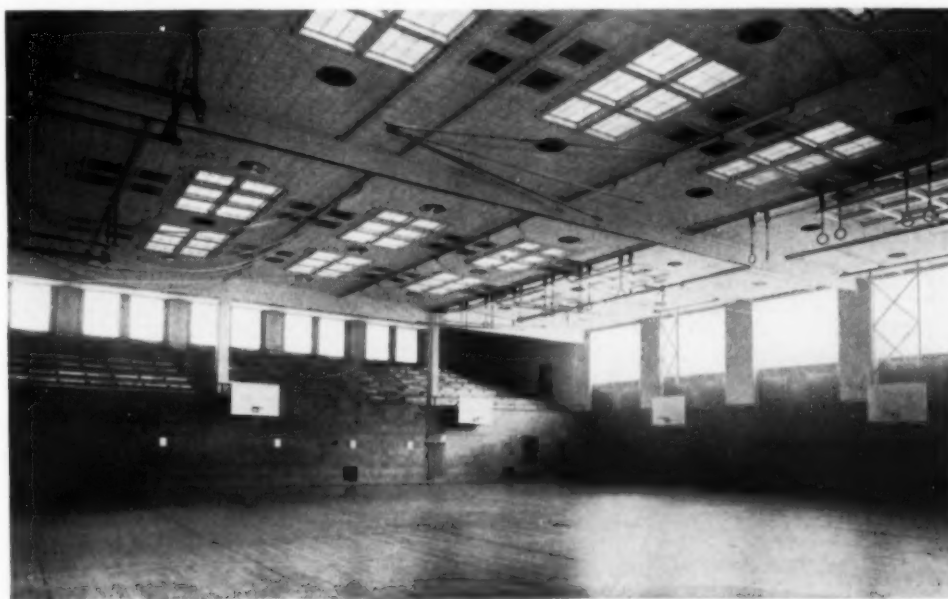
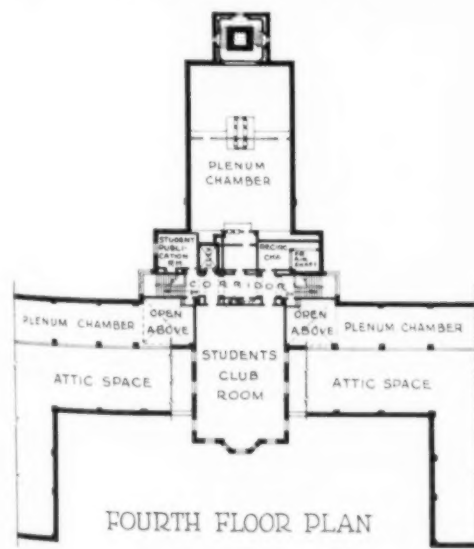
These rooms are located on the north side of auditorium wing on the ground floor on account of service connections, near enough to the stage to be useful in connection with it. The space required in which to paint scenery is available in this department at present, but when all three rooms are occupied for class-work, it will be desirable to install the stage paint bridge and frame for making scenery at the school. One mechanical-drawing room is located adjacent to the art rooms and another adjacent to the shop lecture room.

**LABORATORIES.** The science laboratories are grouped together. Each has an adjacent storeroom, and the biology room has a greenhouse

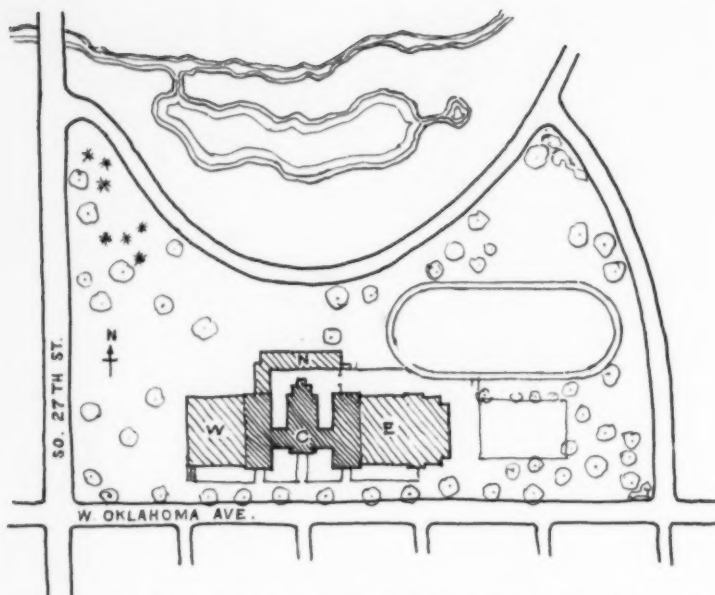
opening into it. The greenhouse has the customary plant benches and an aquarium, and also electric heaters controlled by a thermostatic switch which supplements the steam heat on cold nights. All rooms have slate or alberene window shelves; wood floors; two pupil laboratory tables; darkening shades. Chemistry and physics rooms have tables in rear of room elevated on steppings of 4-in.

rise each. Physics room has a storage battery and a motor-generator set and switchboard from which the demonstration table and each pupil station are furnished a.c. or d.c. current in low or high voltage.

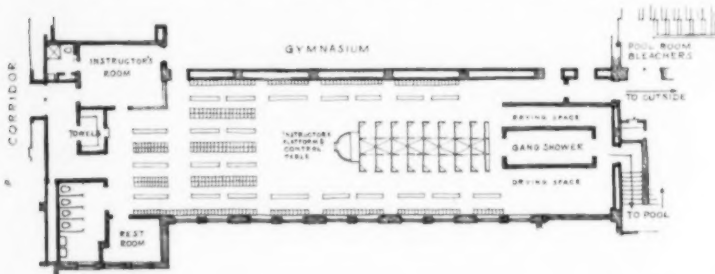
**OTHER SPECIAL ROOMS.** Household arts, social science, commercial and other special rooms are treated similar to classrooms though each has the special cases, storerooms,



*General view of the boys' and girls' gymnasium. The room has hard maple floor, cork board wainscoting, and sound-absorbing ceiling.*



Sketch I—Site of the Pulaski High School, Milwaukee, Wisconsin.



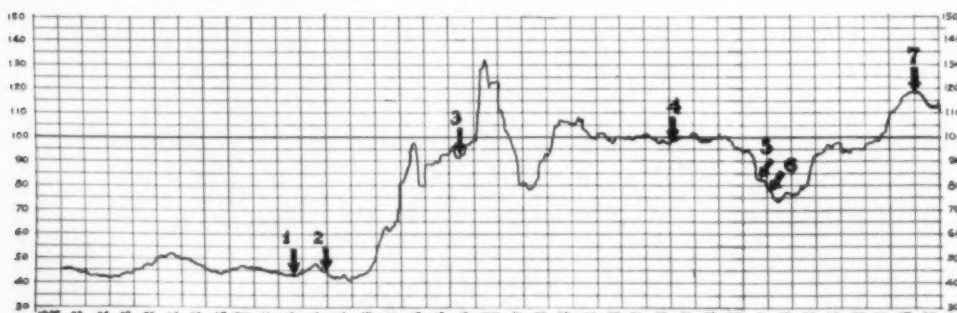
Sketch II—The girls' shower and locker room, Pulaski High School.

or other provisions required to make their equipment complete. The special layouts for all these rooms, and for the shops and laboratories, and their furniture were made in advance of the preparation of the building plans.

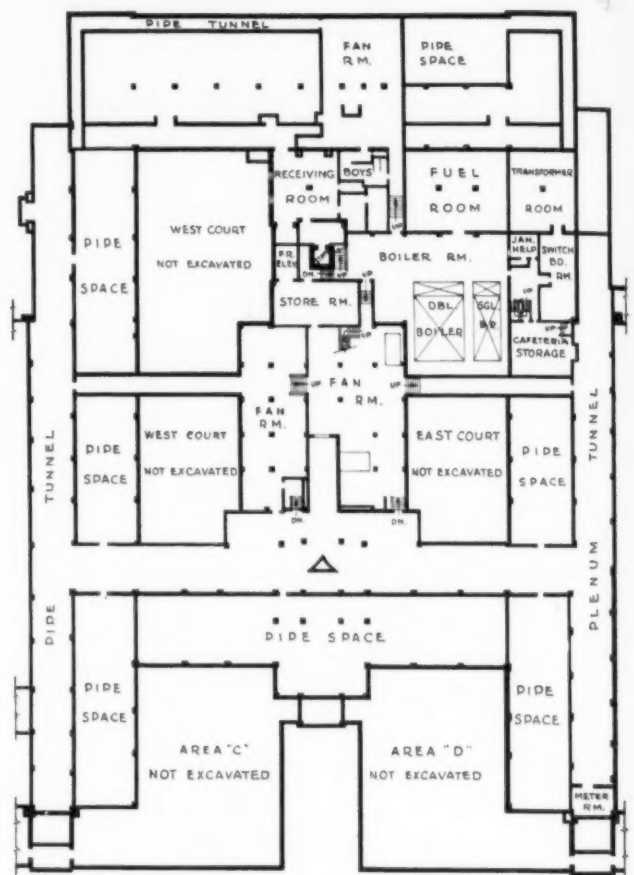
**TACK FRIEZE.** In the art rooms, laboratories, and rooms requiring much space for tacking up illustrative material the frieze above the blackboard level is plastered with an insulating plaster covered with stippled wall canvas; thumb tacks and pushpins can be used in this material.

**GYMNASIUM.** Combined 91 by 97 ft.; separated by electrically operated folding partition; strip maple floor over a blind floor; wainscot cork; spectators' balcony on three sides. This gymnasium on the South Side of the city and the similar gymnasium in the Rufus King High School on the North Side of the city are planned to be used in the nature of field houses for indoor contests between the various high schools.

**LOCKER AND SHOWER ROOMS.** Planned to facilitate the movement of classes containing from 70 to 100 students. Students must take showers, dry themselves, and dress in an interval of from 10 to 15 minutes, and get out of the way of the class coming in for the next period. This requires gang showers, a drain and drying space, distribution of dressing and storage lockers to provide individual dressing space, and an arrangement affording easy supervision by the instructor. Girls' shower room has both shower and dressing stalls and a gang shower with open dressing space in the locker room; use of either is optional with the student; both boys' and girls' showers have individual and gang control, and the girls' shower room has an elevated control table which affords supervision of both gang and stall showers; shower rooms open into gymnasiums, to stairs to swimming pool, and to corridors leading to outdoor gymnasium space. See Sketch II, girls' shower and locker



Sketch III—ENR Building Construction Cost Index. The arrows and numbers refer to the dates when contracts for Milwaukee high schools were let. See table of costs.



BASEMENT PLAN - CENTER UNIT.

room. The general arrangement for boys is somewhat similar, with only gang showers.

**TEAM ROOMS.** The athletic department has two team rooms for boys with toilets and shower rooms for each; coach's room; suit drying room and athletic-department storeroom. This department is cut off from other parts of the building by partitions and gates to prevent access to other parts of the building after regular hours.

**SWIMMING POOL.** The pool at this school is planned for use in public swimming meets as well as for instruction. Spectators' seating is provided on each side of the pool, and these areas are connected by a balcony at each end. There is no access to the pool-room floor from the public space. The room has ceramic tile pool, floor, and base; floor pitched to gutters at side walls; no curb at pool; glazed-brick walls; acoustical cork frieze and ceiling; lower chord of girders enclosed in plaster furring; ceiling lights vaporproof, recessed, and concealed by aluminum fins; doors and frames aluminum; windows glass block. Pool itself 30 by 75 ft., has gutter on each side only; divided into five lanes 6 ft. wide with tile lane division lines at centers of lanes; recessed eyes for attachment of surface rope lane markers; deep-end takeoff has recessed hand holds to each lane; underwater lighting; underwater observation window; equipped with the usual circulating pumps, filters, and chlorinator.

How much did it cost? is a question of importance principally to those who pay for it. A study of the building plans as well as a visit to the building would be necessary in forming an opinion of the

(Concluded on page 122)



# Central or State Government Control of Local Authorities

## Part I. Development of Control and Types of Control

Theodore L. Reller<sup>1</sup>

Recent years have witnessed a movement toward more control of local education authorities by the state in many of the states of the United States. This development is leading toward the development of state systems of education in practice as well as in theory. A basic cause of this development is the partial shift of the cost of education from a property tax locally collected to various taxes collected and distributed by the state. This shift has proceeded far in only a few states. However, economic conditions suggest that it will in all probability continue and perhaps at an increasing rate. Most people recognize that if reasonably good educational opportunity is to be provided this shift is inevitable and necessary. They realize that with it comes also the possibility of the loss of responsibility and initiative by local authorities; that even more uniformity of education may result than has been found. These people, interested in the development of initiative, responsibility, and variation are asking what types of controls have been or may be employed with most promise of developing the desired qualities.

The problem of control arises also in connection with every consideration of the Federal Government and its relation to the education enterprise. Some argue that it is possible to have federal funds for education without federal control. Others reply "He who pays the piper calls the tune" or quote Alexander Hamilton's phrase: "In the long run the control over a man's income is a control over his will!" The President's Commission which studied federal relations to education and reported in 1930 strongly emphasized the desirability of maintaining an essentially local school system in the United States. Concerning federal controls they wrote, "It is particularly unwise to centralize in the Federal Government the power of determining the social purposes to be served by educational institutions or of establishing the techniques of educational procedure."<sup>2</sup>

Somewhat similarly the Advisory Committee on Education which worked under the chairmanship of Dr. Reeves reported in 1938:

Local controls in government, and especially in education, have values that we should do our utmost to retain. If our school system were rigidly controlled from the state capitols or from Washington, it might become more efficient and its behavior would be more predictable, but it could no longer serve to give flexibility to the

social order as a whole. Suitable adaptation to local needs would be difficult.

Despite its obvious inefficiencies and limitations, local freedom helps to assure experimentation, healthy rivalry between localities, popular interest in public questions, and that diversity of form and methods which tends to prevent sudden disruption of the social order. Local school administrators selected by local representatives of the people should therefore be given as much independence by State and Federal Governments as is compatible with an acceptable standard of honesty and activity.

\* \* \*

In order that local initiative and responsibility may be maintained, all Federal action should reserve explicitly to the state and local auspices the general administration of schools, control over processes of education, and the determination of the best uses of the allotments of Federal funds within the types of expenditures for which Federal funds may be made available. The Federal Government should in no case attempt to control the curriculums of the schools or the methods of teaching to be employed in them. In those fields, however, it should carry on research and make the results widely available.<sup>3</sup>

### Reasons for Central Control

While anxious to live up to these principles the Reeves Committee recognized that with federal funds would and should come certain controls. They recommended, for example, an audit by the United States Office of Education of the federal fund accounts of each state, and that the United States Office of Education be given authority to suspend payments to any state after notice and hearing if the state fails to maintain an adequate administrative agency or to make required reports with reasonable promptness. After all even the conduct of research to influence practice in the states as suggested is a type of control. There is also an almost inevitable psychological control resulting from receiving funds. Some of these controls are very indirect and by many people would not be regarded as controls.

Before considering in detail the types and means of control it is desirable to question the reason for its development. Why is it appearing in our federal and state governments in regard to many services? Briefly central intervention occurs when it is forced to do so through crises. While the thirteen states were originally states first and their citizens—citizens of a nation second—this is no longer true. Thus it is necessary that the Federal Government intervene when the local service threatens to break down or fails to reach reasonable standards. The same situation occurs within states. Briefly then it should

be noted that central controls develop for some of the following reasons or out of some of the following conditions:

1. Not all local areas are sufficiently wealthy to supply the essential services for themselves or for the protection of the general good. Large numbers of the small school districts of this country are in this position, consequently they are receiving more and more largely of state funds and the states of course, require controls over its expenditure. The increased costs of the services rendered, the expansion of services offered as well as the great variation in wealth of local areas suggest that this process will continue for a considerable period of years.

2. Self-taxation is distasteful. Many areas which could raise more ample revenues locally fail to do so. Without any interest in poorer areas they appear to prefer to pay larger sums to the state—from which they receive a smaller sum back than to levy the smaller sum directly upon themselves. The result of receiving these state funds has been indicated.

3. Local districts are likely to be deficient in knowledge. In some instances, locally elected boards are without necessary intelligence and experience to provide a reasonably good service or to determine sound policies. In the state service a group of officials with training and wide contacts can analyze various facts and propose solutions. The larger local districts should be much less in need of such central service than the small local units.

4. Local districts in many instances are deficient in lay and professional leadership. As local districts become larger and have competent laymen to determine policy and employ permanent skilled advisers and administrators, central control in the same proportion becomes unnecessary. It is a sad paradox that those representatives of very small units who oppose state interference and fight vigorously to prevent its spread or the development of larger local units are probably doing more than any other group to insure the development of rigid central controls. For in proportion as local units are inefficient, there will eventually be central controls.

### Need of Governmental Partnerships for Education

5. Within many local communities powerful interests work against the good of the community. Local communities have within themselves the seeds of good and bad administration. Local communities frequently fail to enforce compulsory-at-

<sup>1</sup>Assistant Professor of Education, University of Pennsylvania.

In the second part of this paper, to be published in the May issue, Dr. Reller will take up the various instruments of control employed by central administrative departments of the states.

<sup>2</sup>National Advisory Committee on Education, Report, Federal Relations to Education, Part I, p. 29.

<sup>3</sup>The Advisory Committee on Education, Report, pp. 40-42.

tendance laws. They may insist upon "home talent" whether it is for the good of the children or not. They may pay excessive sums for tax collection or spend funds carelessly and without receiving a large return. As a result of such conditions the state enters the picture to prevent the community being harmed by some of its members and to prevent harm to the state.

6. There is a lack of belief in the possibility of governing the local community democratically and efficiently. Related to this is the lack of interest in local government affairs. Many people, therefore, look to central controls as the easiest or preferred method of having efficiency in their home communities. This attitude, of course, encourages the development of central controls.

7. There is a growing recognition that the educational service is not necessarily a local one, a state one, or a federal one. Rather the view is gaining ground that education is vital to each of these areas and therefore that the service should be rendered under the guidance of these three areas. It is not, therefore, a matter of anyone controlling the other but a matter of developing an effective cooperative partnership. Schools are not instruments of the local or state governments but the agents of all groups, the community, the state, the nation. The idea of a partnership needs to be emphasized considerably more than it has in most of our thinking about administration. This partnership should, of course, be one in which each partner does that thing which it is most essential or desirable that it should do and that thing which it can do best. Thus the local unit might retain large control over curriculums and methods while receiving state or federal funds, because all members of the partnership recognized the desirability of such an arrangement.

8. There has been a growing state support and control, and there probably will be an extension of federal support and controls because it is increasingly essential that all the people of the nation enjoy opportunities such as education. In a highly interdependent society, marked by mobility and ease of communication, inadequate provisions in one area have a serious effect — out of proportion to the number of people involved — upon the nation as a whole. It has also a disintegrative effect since bad examples are likely to be contagious, and much effort is required in each community to maintain highly desirable practices.

With this general picture of the conditions out of which and the reason for which, central control is developing or spreading, attention must be paid to the types of control which may be exercised. This may assist in determining the types of control which it is desirable to encourage the development of by states in dealing with local areas or by the Federal Government in dealing with the states or subdivisions of them.

### Control by Laws

1. *Statutory control.* This type of control has been widespread in the states of the United States. It is, of course, essential that certain minimum requirements and general principles should be defined by statute. However, the attempt to control many details through statute is unfortunate. The many attempts to control textbooks or subjects taught by statute illustrates a too specific application of this type of control. The detailed specifications of the Smith-Hughes and subsequent vocational-education acts illustrate it on the part of the Federal Government. The handling of child labor and many of the compulsory-attendance laws also illustrate the attempt of the state to control through detailed statute.

The advantage claimed for statutory control is that it secures uniform practice. Its chief disadvantage is that it tends to be rigid and inflexible. In an area such as education where flexibility is essential, where local needs and conditions need to be carefully considered and employed, such rigid control is especially undesirable. Because it has to be uniform, the application tends to be unintelligent and to do genuine harm in many instances. It is easy to see that this type of control does not tend to encourage the able and efficient community for to it are applied the same detail of controls and restrictions as to the community which discharges its obligations in an outstanding manner.

2. *Judicial control.* Judicial control is, of course, closely associated with statutory control. This type of control comes into play when people either do not understand a law or when they disobey it. Under this system no action is taken until an offense has been committed. There is no attempt at assistance to the local area, or at prevention and surely no attempt at continuously and cooperatively attempting to meet the problems facing the local school district. Following an offense a case is tried and a principle established or an interpretation made. Other cases may follow. This process is exceedingly time consuming and expensive and does not encourage the cooperative effort of Federal Government and state or state and local subdivision thereof to cooperatively meet problems which are their joint responsibility. Judicial control may in some instances also be related to administrative control but its widespread use has been in relation to statute.

### Control by Administration

3. *Administrative control.* The development of administrative control has been slow in the United States. It has recently extended itself rapidly however, as the social-service program has expanded. In most of the states there has been little administrative control in education. Administrative control aims at the development of the concept of partnership between the central and local authority. It also is an attempt at

preventive administration. The central authority and local authority attempt to work through the problem which is their mutual responsibility and to avoid mistakes.

Administrative control recognizes that it is not enough for the central government to will something; for effective administration requires that the local administrator serve with strong and continuous incentives. A local administrator who regarded his position as carrying out things determined from above would lack the initiative, responsibility, and desire to fit his service into the needs of his area, while an administrator who was a partner in the determination of the things to be done would understand, grow, and serve with a thorough interest in the enterprise. It should be noted that while the central authority would exercise certain controls as a result of statutory provisions, it would frequently exercise control not because of statute but because of a recognition of the ability of the central authority to serve.

The controls which an agency exercises may rest in considerable part upon prestige, and prestige is gained through long years of effective and efficient service in control. If it is true as is generally claimed that the central authority has the opportunity to examine conditions over a wide area and to focus upon local problems a superior experience, intelligence, and objective view, it is clear that such prestige would grow. Such prestige, of course, depends upon the personnel. It is not to be expected that administrative controls can be developed in a tolerable manner so long as state departments of education are rapidly changing in membership, are subject to political controls and do not attract the ablest men in the service. Long tenure, outstanding ability, and intelligent exercise of authority are essential if administrative control is to become widespread and if through it the whole situation is to be improved.

Another essential in the development of such a system is the development of efficient, reasonably sized, ably administered local school units. No central authority could be in intelligent partnership with as many school districts as remain in some of our states.

### Responsibility of Larger Authorities

It is important to note that under this type of control the larger and more able authorities are given much more responsibility than the smaller and less competent. It is the desire of the central administrative authorities that the local authorities be given as much control as is compatible with the best development of the service. It is the desire to encourage local interest. This can only be done by placing responsibility upon the local authority. The amount of control extended must rest largely with the central department. Such department cognizant of the character and quality of the local authority and mindful of its circum-



# Fifty Years of School-Map Making in America

A. J. Nystrom<sup>1</sup>

It is a rather interesting fact that the 50th anniversary of the SCHOOL BOARD JOURNAL coincides with the length of time that the writer of this paragraph has been connected with the school-map business.

Fifty years ago there was but one set of school maps published in America, consisting of eight comparatively small-size political wall maps. Many of the maps sold in this country were then imported from Europe. Three series of political maps were offered — one small size, one medium size, and one very large size series; also one series of medium-size physical maps. But no historical or commercial maps of any kind were available. This condition prevailed until the early part of the present century, when another American company published a low-priced series of political maps.

The next step was the publication of an American edition of maps published in Edinburgh. In 1905 the publishing house of W. & A. K. Johnston, in collaboration with their American representative, sent transfers or duplicate plates of their medium-size political wall maps to this country. From these, lithographic plates were made and an American edition printed.

This was a distinct advantage to the schools of this country as the price of the maps was greatly reduced due to several factors, such as the saving of import duties and the transportation charges from abroad. These reduced prices resulted in a greater demand; and the consequent printing of larger editions made for additional economies and still further reductions in price.

## Larger Maps Followed by Smaller

So successful was this first venture that it was followed shortly by the publication of another and slightly smaller series of school maps. For this series another American innovation was introduced; viz., the machine mounting of maps. Until that time all wall maps were first printed on paper, and the sheets were then backed with cloth by hand labor. The newer method was the uniting of the paper and the cloth by machinery in long rolls. After the cloth backing was applied, the rolls were cut into sheets of map size and lithographed. Then they were made ready for school use by simply attaching rollers for hanging, thus doing away with the more expensive hand mounting. This series became the "Model T Ford" of the school map business — maps at a very low price which, consequently, enjoyed a tremendous sale.

Encouraged by the success of this

venture, Messrs. Johnston, through their American representative, published a third series — duplicates of their largest and finest maps. It may be added that these larger maps, as well as all of the better maps even to this day, are hand mounted on cloth which makes for the greatest durability. Only the cheaper maps are machine mounted.

## Keeping Pace with Geography Teaching

These were the first steps in the building of the school-map publishing industry in America. During the past quarter of a century greater strides have been made, the publishing industry keeping pace with advanced methods of geography teaching. The first maps were all political, quite detailed with a multiplicity of names. In most of the present-day maps schoolroom visibility and teaching value have been enhanced by omission of unnecessary details. During the past twenty-five years various American map publishers have provided all possible types of illustrative material for both geography and history teaching — relief maps, both in actual relief and in graphic relief form; physical maps, followed very recently by the latest type of physical-political maps. Regional-political maps, patterned after a very popular textbook on that subject, have enjoyed an immense sale. Twenty-five years ago there were no historical maps published in America. The only maps available were those on European history published in Germany. Now there are maps covering every era in history from the earliest civilization all through the various epochs in medieval history and into the history of America from its discovery down to the present day.

American map publishers have been ever ready to keep up with modern trends in geography teaching. All types of maps are available — commercial geography maps, products, and industries; climatic maps; maps on civics and government; outline maps, both wall and desk sizes. Another phase of the industry which should be mentioned is the more recent publication of charts on physiology, botany, and zoology. Until these publications appeared, American schools were dependent upon Germany for illustrative material on these subjects.

Geographical globes should also be mentioned. Before the world war globes were seldom seen except in schools and libraries. With technical improvements in manufacture, globes have been produced in such quantities and at such low prices that there is scarcely a home in the land that does not possess a globe of some kind. Of the making of maps, there is no end

and all of this development has taken place during the life of the SCHOOL BOARD JOURNAL. In fact, most of the progress in map publishing has been made during the last half of that period.

## Development of Domestic Map Making

At the outset of this fifty-year period but few maps were used in the schools. As already pointed out, this was due to the fact that the maps available were of foreign publication. But a more definite reason for the scant wall-map use was the fact that the available maps were lacking in the educational requirements of an emerging curriculum.

At the beginning of this span of years, locative geography was the important factor of the prevailing geography courses. The source and course of rivers; the boundaries of states and provinces; the location of cities, mountain ranges, and peaks; and other geographical data claimed principal attention. In a manner, the smaller, poor maps in the geography textbooks could be used for this sort of classwork. Occasionally it might be that the teacher would vary the program by resorting to an earlier practice — the singing geography lesson. "State of Maine, Augusta on the Kennebec River; New Hampshire, Concord on the Merrimac River" was lustily sung if the children lined up for such a class demonstration.

A familiar definition of geography in the older textbooks was, "Geography is the study of the earth as the home of man." However, scant attention was given to the fundamentals of this definition as the text progressed.

But with the bringing out of new geography textbooks and the development of domestic map publications, a richer and more comprehensive geography curriculum has come into use. The surface structure of the country; the character of the land; the nature of the soil; the amount of rainfall; the prevailing winds and the temperature have become factors for consideration. In short, the environment of man and his response to it has received emphasis, and as a result, geography study has taken on a lively interest and value.

No matter how well the printed page brought out these features, the new wall maps available give the pupils the vivid picture and the data by which they can *think through* the problem instead of memorizing the words of the textbook. The geography recitation has become an interesting adventure as the pupils trace on the wall maps the various factors of the subject under discussion.

The development of the study and the teaching of geography did not mean that the use of political maps, formerly the basis of all geography classwork, was cast aside. The American made political maps have emphasized only important data and eliminated the mass of detail that was plastered on the earlier wall maps.

(Concluded on page 106)

<sup>1</sup>Chicago, Ill.

# THE AMERICAN School Board Journal

Edited by Wm. Geo. Bruce and Wm. C. Bruce

## School Directors Who Direct

THE industrial and commercial enterprises of this country are largely under corporate direction. This means that important enterprises involving heavy investments and important transactions are in the hands of small bodies of men who formulate their policies and guide the destinies of the same. In other words, the enterprises are controlled by directors, consisting in each instance of a small group of men.

The question which is occasionally raised is whether the directors in charge of an enterprise really direct the policies of the same and wisely delegate the execution of these policies into competent and reliable hands. A writer in the *New York Times* recently characterized what he called a typical board of directors of a large corporation in the following language:

"The president reads a prepared statement while two directors smoke in silence, a third stares out the window, a fourth draws doodles on a scratch pad and the fifth critically examines a broken fingernail. Finally the president, who is the sixth director, says, 'That, gentlemen, is the situation in a nutshell. I should like to hear your comments.'

"There is a buzz of conversation. 'I didn't quite get his point about bonuses. Same as last year?' 'I've got to get away by 4:15.' 'As I was saying, it was so warm in Miami.'—A seventh man arrives and asks, 'Well, where are we?' His neighbor says, 'You haven't missed anything. We just heard the report.'"

All this, as applied to the business world, may sound somewhat extreme and not strictly applicable to the school world; namely, to those who deliberate on boards of education. And yet, the statement may at least contain something which is suggestive. It may be argued that the director of a large business corporation is a man of means who has many interests and at the same time may be given to social pleasures and pastimes. On the other hand, it may be assumed that he who accepts a membership on a board of education is imbued with the thought that he is performing a sacred task of citizenship and hence is more loyal to the office entrusted to him.

There can be no question that the school system of any community, be it large or small, constitutes an important enterprise which involves large sums of money and performs a service which vitally concerns an entire constituency. School business is big business and those who direct its destinies must be fully as able and attentive as are those who guide the great industrial corporations of the country. They may not lapse into that indifference and superficiality which affects corporate directors in the business world, but it is well to realize that shortcomings and weaknesses may creep into any group of men entrusted with an important task.

It behooves the individual school director to know the ins and outs of the school system over which he presides, familiarize himself fully with its needs and wants, and apply himself to the formulation and fostering of policies that will realize the true objectives in hand.

## Shall School Personnel Unionize?

IN THE cities there is a steady march toward the unionization of nonteaching personnel. For many years it has been impossible for nonunion carpenters, plumbers, electricians, and other craftsmen engaged in building maintenance to get and hold jobs in the large city school systems. In recent years, janitors and engineers have joined local groups of workmen or have organized separate unions under the Federation of Labor. Less progress has been made among school-board office workers and school clerks because these groups are relatively small and scattered and the very favorable conditions under which they work lead more naturally toward organizations that have a professional approach to their mutual interests and the betterment of their status. Among teachers there is a relatively small but determined group that is unionized because its members feel that professional development and greater participation in democratic practices of administration are only possible by direct alignment with labor. By mutual help in legislative enterprises, in local school programs, and in the development of favorable public opinion, both the interests of teachers and the schools and of labor can be advanced.

Some of the union movements in large and small cities can be directly traced to unwise policies of the school boards and to insufficient leadership on the part of school-business executives. The prevalence of partisan politics, of personal favoritism in the employment and promotion of engineers, janitors, and clerical workers, and difficulties over wage scales have inevitably driven school employees to seek aid from union leaders. Where fair personnel policies have prevailed, there has been little emphasis on union activities of employees, and problems have been solved without friction. Bargaining rights, so called, have been limited to the natural utilization of the union officers and spokesmen for mutual consideration and orderly solution of problems. Attempted dictation of policies by the unions have been exceedingly rare.

Boards of education may well remember two points in approaching the problem of unionization of their employees. In many states the official recognition of unions is legally questioned, and no man may be preferred or dropped from school employment because of his personal labor attitudes and loyalties. A recent case in Peoria brought to light again that, under the Illinois laws, an employment contract between a school district and a union has no force in law. Generally speaking all approaches to agreements with labor groups must be informal and general expressions of policy only. The ultimate test of employees must be good citizenship, fitness for employment, and compliance with local and state legal requirements.

A second point in this problem of the relationship between labor and boards of education was first established by Calvin Coolidge when, as Governor of Massachusetts, he told the Boston police who wished to strike, that "there is no right to strike against safety by anyone at any time, anywhere." This same idea is expressed by a man who is no less sympathetic toward labor than President F. D. Roosevelt, who said in 1937:

"I want to emphasize my conviction that militant tactics have no place in the functions of any organization of Government employees. Upon employees in the Federal Service rests



the obligation to serve the whole people, whose interests and welfare require orderliness and continuity in the conduct of Government activities. This obligation is paramount. Since their own services have to do with the functioning of the Government, a strike of public employees manifests nothing less than an intent on their part to prevent or obstruct the operations of Government until their demands are satisfied. Such action, looking toward the paralysis of Government by those who have sworn to support it, is unthinkable and intolerable."

When it is clearly understood that strikes are weapons which school employees cannot use, much of the opposition on the part of school boards toward unions of janitors, clerks, and school mechanics should fade. Nearly 100 per cent of the worry and fuss about school unions is a waste of time and could more profitably be directed toward building up the good will of the staffs and getting their hearty help in cooperative enterprises for the welfare of the schools, the efficient doing of the work in hand, and the individual and group welfare of the workers themselves.

### Going Out of Town for a Superintendent

ONE of the characteristics of the country's decentralized system of school administration has been the itinerancy of the school superintendency office. School authorities in their desire to secure educational leadership have sought the man regardless of locality. The result has been that during the past three decades, educators have made long cross-country jumps to larger school systems and more promising fields of service. This tendency has received a check in recent years. In filling superintendency positions, boards of education have been inclined to consider local aspirants in preference to outside talent. The merit system still has had its appeal. Home-town solidarity has found its inception in community loyalty and self-interest.

The question arose recently at St. Louis, Mo., where Dr. Henry J. Gerling had retired as superintendent of schools and a successor was to be chosen. The first suggestion that came to the board of education was that an outstanding educator, one of national prominence, must head the St. Louis school system. "Nothing short of the best" was the slogan employed.

Mark D. Eagleton, president of the board of education, asserted that there had been some criticism of the plan to select a new superintendent from outside St. Louis on the ground that it would be a disregard of the merit system and that there are, in the St. Louis schools, a number of capable men qualified for the job.

"I well realize that," Eagleton said, "but I would like to call attention to the fact that there has been a deep-rooted factionalism in the board for many years. I think a man who is entirely unrelated to the school background and problems here could act more efficiently and without fear or favor.

"Normally the merit system should be followed, but we are faced with an unusual situation here. While I dislike to go outside of St. Louis for our new superintendent, I think it will be best for the board of education and the school children of St. Louis."

Thus, the two opposing viewpoints on the subject are quite clearly demonstrated. The thought expressed by President Eagleton has been observed with good results in many instances where a large school system sought an outside man.

There is no task within the province of a board of education more exacting and of greater importance than that which deals with the selection of a school superintendent. And where the approach to the task is prompted by a sincere determination to serve the best interests of the schools the outcome is usually a satisfactory one.

### The School-Administrative Task of the Year

IF IT can be said that the administration of the nation's schools has become increasingly serious then it may also be added that the past year has been the most difficult and complicated. The task of squaring a reduced income with essential standards of efficiency has put the ingenuity as well as the loyalty of the school administrator to a severe test.

And here we come at once to the realization that a budget is not only an essential document in the administration of a school system but one that causes more complications than any other administrative task.

Budgetmaking procedures have been worked out to great detail and much literature on the subject has been provided. Thus, there can be no longer any doubt as to the real purpose and the mode and manner of building a school budget. Where the estimated income is ample to carry out a contemplated program the task becomes an interesting one.

But, where the budget builders are confronted with a reduced income, where cuts and slashes become necessary, where school terms must be shortened, salaries reduced, classes doubled, special studies eliminated, etc., their job becomes an embarrassing and painful one. The question of just where to apply the pruning knife becomes a serious one. In fact, to reduce a budget and at the same time keep the school program upon a reasonable basis of efficiency requires in instances the genius of the superman.

In reviewing the year in the field of school administration there can be no doubt that the most exacting and the most vexatious task has been the building of budgets. In many instances, school officials have held public hearings in which the citizen was invited to express himself as to the expediency of this or that expenditure.

Such conferences have, on the whole, proved helpful in arriving at final conclusions. The fact remains that no school system can spend more money than it receives, and if more money is needed, it remains for the taxpaying constituency to grant it. The tax pressure groups will resist, but sound public judgment must finally determine upon that which is reasonable and fair, and that which is detrimental and harmful. Public sentiment when properly informed, will agree that the public schools must go on!

In many cities the superintendent may be a man who has been elected two, three, four, or five years before by a board wholly out of touch and sympathy with the people of today in their ideals and aspirations for types and kinds of education.

This school of educators appears to forget absolutely that the members of the school board are the direct representatives of the people who own the schools, who send their children to the schools, and who furnish the money to run the schools. They come directly from the people, elected to carry out the wishes of the people, and accountable directly to the people for their stewardship at the close of their terms.—*Wm. T. Keough.*

# Techniques in Supervision for the Small High School

Charles Wells, Jr.\*

(Continued from February)

By now we have seen that the superintendent, if he wishes his supervision to be successful, will survey his school and community, prepare upon this basis, with the aid of the teachers, a plan of supervision, outline this plan with the objectives to be attained and the techniques to be used, and, finally, consider just how those techniques can be best adapted to the needs of the school. It is with the final phase of techniques that we concern ourselves at the present.

## Actual Practices in the Small School

The first of these techniques, and one of the most promising and important of all, is that of the proper induction of the new teacher into the school system. I believe that it can be truthfully said that, in the majority of beginning-teacher failures, the superintendent was, in some measure, responsible. Many of these failures could have been averted by proper induction and supervision by the superintendent.

"If inefficiency in a school is the outgrowth of maladjustment, of lack of coordination, of misunderstanding, of forces pulling in different directions, of people working at cross purposes, of a lack of understanding of desired goals, or lack of wise leadership, the administrative officials must be held responsible."<sup>10</sup> The question then, becomes that of how the teacher can be most efficiently initiated into the school.

"A well-planned and carefully organized orientation and adjustment program is undoubtedly one of the most important means of developing morale among a teaching staff, and, be it emphasized here, morale is a major factor in the success of any school. The superintendent or principal who can kindle the enthusiasm and fires of ambition, who can nurture the will to succeed, who can inspire coworkers, who can win the confidence and co-operation of his young, new teachers has won a major battle in his campaign for an effective, coordinated school."<sup>11</sup>

The following techniques have been suggested as starting points in building a program of orientation and adjustment which is designed to bring the efficiency of new teachers quickly to a peak and to develop an *esprit de corps* among all the teachers.

## Favorable Impressions

First of all, it is important that the new teacher be given favorable first impressions of the school, the community, and the su-

perintendent. All inquiries concerning vacancies should be answered accurately and promptly and the necessary qualifications should be so stated that the expense of interviews will be avoided when unnecessary. In personal interviews friendliness and politeness will greatly aid both the candidate and the superintendent. The names of the school board and their offices should be provided for the use of the teacher who is to interview them. (It might be well to note that in many smaller towns the teachers are employed with little consideration for the wishes of the superintendent, so that it is doubly important to provide favorable impressions for anyone who may apply for the position.)

When the teacher has been hired, it is the duty of the superintendent to write to him or to interview him, learning all that he can concerning the new teacher's personal accomplishments, hobbies, interests, and special abilities. He should be welcomed heartily and sincerely into the school by the superintendent.

As soon as possible the new teacher should be acquainted with the building in which he is to work and with its management. The new teacher should be assisted in making arrangements for board and room — this does not mean selecting them for him, but aiding him in finding accommodations which are suitable to him.

In general, the teacher may feel more welcome in the community if he is acquainted with the president of the PTA, the head of the school board, and the officials of the Chamber of Commerce (Rotary, Kiwanis). If personal contact is not possible, he should receive letters of welcome from all of them.

As soon as it has been determined, the new teacher should be notified of those definite subjects which he is to teach, his extracurricular duties, and his special responsibilities. Thus he can plan his work to the best of his ability before school opens in the fall. Often it is convenient to discuss with him the type of children he will instruct, the general background of the school's population, the major problems with which he will be confronted, and the challenges of his position.

## Conferences Valuable

All of the teachers, including the new ones, should be notified by letter, at the earliest possible opportunity, of the arrangements for the opening of school: the date and hour of the preopening conferences, general plans for the first day of school, the subjects which they are to teach, and other important information.

The preopening conference is important, and for it these topics are suggested:

1. Formal welcome to school and community
2. Introduction of new teachers
3. Discussion of general aims and purposes of the school and of any special objectives or goals for the year
4. Discussion of plans and procedures for the opening day
5. Discussion of more important matters of administrative detail and explanation of reports and record forms
6. Distribution of teachers' manuals, assignment sheets, duty schedule, class schedules, complete school calendar, and similar items (Some of these can be omitted if the school handbook system is in use)

One of the excellent devices used by many schools is the handbook or manual of administration for the teachers' use. It is a most useful guide to administrative practices and policies. It will serve to coordinate the management of the school and classroom and aid new teachers in meeting many troublesome details. The handbook will be at its best if it is looseleaf so that frequent revision is possible and if the teachers participate in its writing and revision.

The handbook should contain the school calendar, the schedule of salary payments, the administrative rules of the school, the necessary forms, records, and reports, a list of courses of study, a list of teachers' manuals, of the textbooks which are to be used, together with their publishers. There, too, should be the policies and rules governing the extracurricular activities.

Every teacher should have a copy of the handbook, and new items should be added to it at the preopening conference. In addition, during the school year bulletins of announcements, discussions of pertinent school problems, comment on the general school situation, and supervisory helps should be issued for inclusion in the handbook.

New teachers, especially in the high school, should be introduced to the whole student body on the first day of school.

## Other Forms of Induction

During the school year induction takes other forms, but it is still important. The new teacher often feels somewhat lost, and it is effective to appoint an older teacher as sponsor, if the superintendent has not the time to care for it himself.

The local teachers' club, if there is one, is also important in making the new teacher feel better adjusted.

In order that he may become well adjusted, the new teacher must have a clear understanding of his own duties, and of those of the principal or superintendent. All of the above devices have tended in this direction, but especial care should be taken to see that there is no misunderstanding.

The superintendent should urge his teachers to become members of their state teachers' association and of the association of the teachers of their own subject, such as the Classical Association for Latin teachers, in order that they may be acquainted with the latest ideas and methods in their subjects. If the teacher's budget will per-

(Continued on page 122)

\*Instructor in Akron High School, Akron, Ind.

<sup>10</sup>Saylor, Galen, "The Superintendent's Part in the Success of the New Teacher," *AMERICAN SCHOOL BOARD JOURNAL*, pp. 17-19, August, 1938.

<sup>11</sup>*Ibid.*



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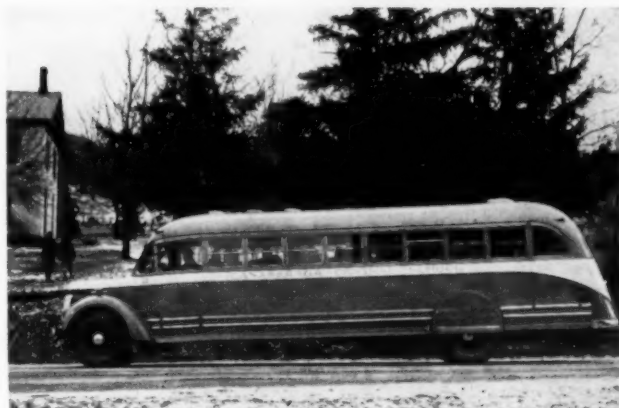
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# INTERNATIONAL SCHOOL BUSES

## Implementing Dr. Enlow's "Equal Pay for Men and Women? Yes! Equal Salaries? No!"

E. H. Hanson<sup>1</sup>

The philosophy, though not the implementation, expressed in the article, "Equal Pay for Men and Women? Yes! Equal Salaries? No!" by Dr. E. R. Enlow, impresses me as being sound.<sup>2</sup> In his statement he quotes, but does not defend, Dr. McGaughy's contention that the supply of men teachers is limited; higher salaries, therefore, must be paid to secure their services. He contends on his own account that there should be equal pay for equal work but insists that pay should be in terms of real wages or standards of living rather than in a fixed money wage.

In this I believe that Dr. Enlow is correct. The law of supply and demand is not a factor, at least in Rock Island. We are able to engage almost any man we want under the terms of our salary schedule. Even though the law of supply and demand does not force the issue here, the contention that some should receive more money wages than others in order that there be equal pay for equal work is correct. Many persons have the additional burden of a family to support; hence it is entirely true, if the money incomes are identical, that these individuals are forced to accept a much lower standard of living than colleagues who do not have these burdens. Since society has a fundamental stake in the home as a place to bring forth and rear children, it is entirely just that society contribute to its support, at least to the extent of not penalizing the head of it with a lower standard of living. He proposes to deal with the problem by means of a scientifically derived formula. The differential should, he writes, probably be based on the typical male and the typical female. To quote:

Suppose, for example, that the model male teacher were found to be possessed of a wife and two children. Then let the salary differential be based on the ratio between the cost of living for such a man and that of a single woman teacher.

Dr. Enlow himself states that his proposal is probably not an ideal one. I feel that it is open to modification for the following reasons:

1. His proposal to pay all men extra compensation because the typical man is married and has two children is not sound, since it is obvious that many teachers are bachelors; these do not deserve the differential.

2. The proposal is not just because it overcompensates families with one child and undercompensates those with more than two children.

3. It is socially indefensible because it

rewards childless couples in the same degree that it compensates fruitful ones. There is even some danger that it may further tend to discourage the coming of children. I can see no justification in allowing a differential to couples who have no children upon the grounds that their cost of living is greater than that of single persons. Such couples are not bearing any of the burden demanded by society for the perpetuation of itself. The fundamental duty of the home is to bring forth and rear children, not merely to provide satisfactory adult companionship. It is highly desirable, of course, that there be this satisfactory adult companionship, but that is purely a personal affair. Society should not be expected to assume an extra financial burden to provide it. A man who marries for adult companionship should expect to pay for it in exactly the same fashion that he pays for any other personal good thing. It may

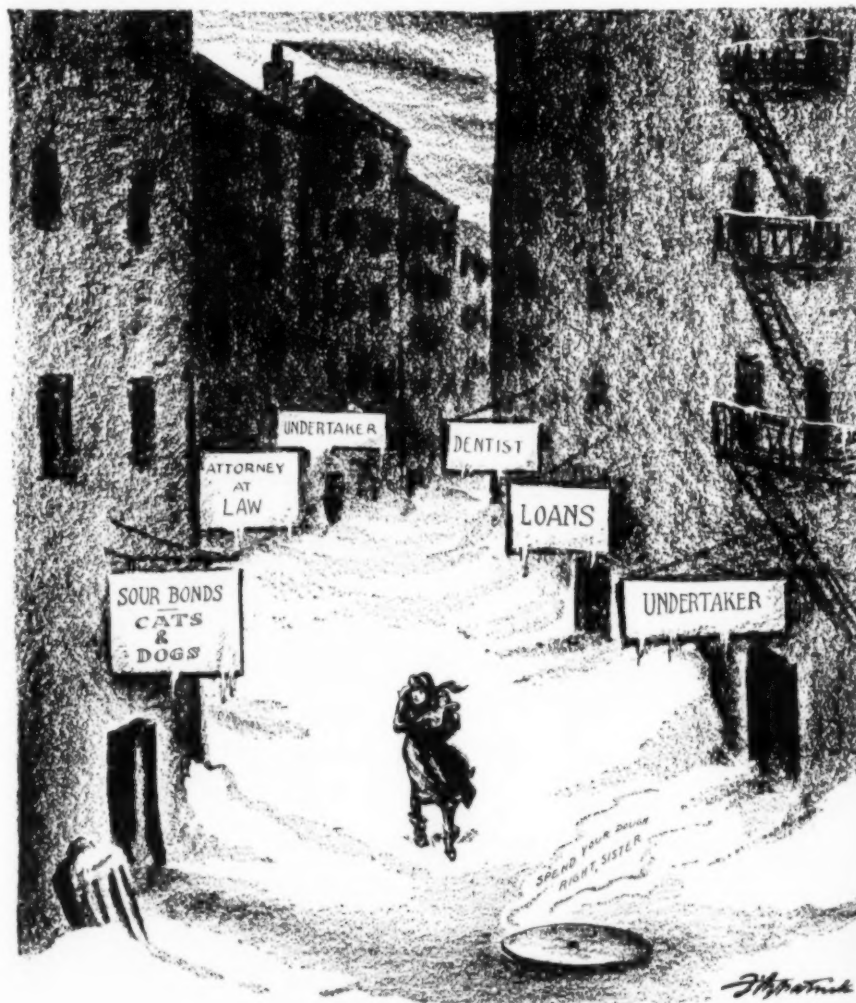
be contended that there are some couples which cannot bear children. This, of course, is obviously true. Still, such couples may discharge their social responsibility as families by adopting children. A number of childless couples in our system have done just this and, since we allow a differential for minor dependents, natural or adopted, these families are receiving extra income.

4. His formula takes no account of widows or wives of men who have become crippled and upon whom the burden of maintaining the family rests. In our system, we have a number of widows with children to support. Certainly they are entitled to as much consideration as men with children to support.

It is not necessary to solve the problem by allowing a differential to all men alike, married or not. It is simple to establish an allowance on the basis of the number of natural or legally adopted children and assign the differential to men and women entitled to it. For a number of years our schedule has contained the following clause:

Teachers who do not have a husband or wife regularly employed, shall be given a differential of one hundred dollars for each unmarried child, not regularly employed, and under twenty-one years of age on January first of the current school year. Principals who do not have a wife

(Concluded on page 68)



A TEACHER IN SCHOOL BOARD ALLEY.

How the St. Louis Post-Dispatch views the St. Louis board of education.

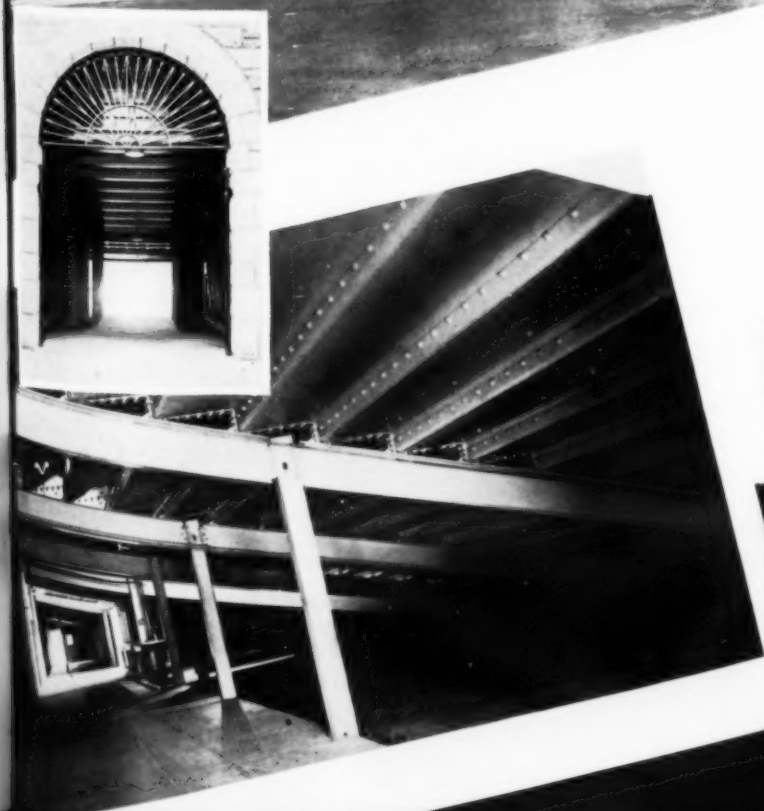
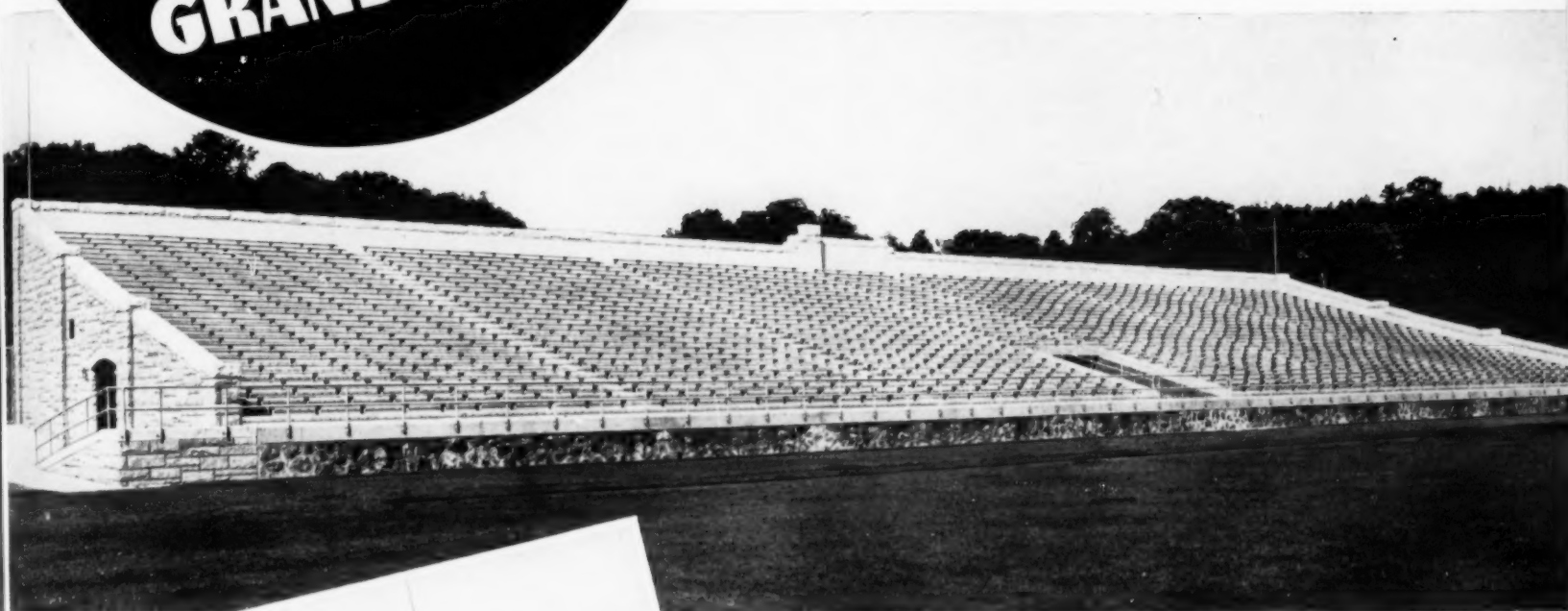
<sup>1</sup>Superintendent of Schools, Rock Island, Ill.

<sup>2</sup>SCHOOL BOARD JOURNAL, February, 1940, p. 20.



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(Concluded from page 66)

or husband regularly employed shall be given a differential of fifty dollars for each unmarried child, not regularly employed and under twenty-one years of age on January first of the current school year.

1. Part-time employment while the minor is still in school does not constitute regular employment.

2. Any regular employment, even though of a part-time nature, while the child is not in school constitutes regular employment.

3. Summer employment between years of school attendance or immediately succeeding graduation from high school does not constitute regular employment.

4. The total differential allowed any teacher is five hundred dollars.

We might readily admit a charge that our differential is not adequate. We submit, however, that if funds ever become

available to correct this situation, we should correct it not by applying a general formula as proposed by Dr. Enlow, but by increasing the differential per child.

I believe that our plan is superior to the one proposed by Dr. Enlow because:

1. It accepts the fundamental philosophy of his contention.

2. It deals justly with men and women who bear the extra burden of rearing children.

3. It does not reward bachelors nor men who are maintaining childless families.

4. It allows aid in behalf of adopted as well as natural children.

5. It has worked successfully for five years in a city of 40,000 people, which in turn is part of a metropolitan area of 170,000 population.

## The Political Board of Education\*

What promises to be a serious detriment to the educational system of the United States, is the grievances and differences which are constantly advanced between members of boards of education, who are opposite in their views politically and carry their antagonism into the consideration of educational questions. It seems to be a peculiar thing, that a member, who is a man, a citizen, and a parent, can stand

before his fellow members and oppose a question which *he knows is right*, but because he believes that the accepting of such a question will in some way or another benefit his political opponent, he bends all his efforts and influences to cause it to be put aside. Such may be human nature, but there is little advancement along educational lines in this sort of human nature, and if some psychological brain-twister will propose a remedy for it, I am sure we would all appreciate it.

There is no room in educational matters

for the political member. That is the conclusion that should be arrived at by the country in general, and the sooner the better. We want members first of all who are educated men, used to deciding important questions—men who are parents, and whose children are in school, and above all men who will come to the meeting prepared to contend ever and always for the right, and for the advancement of the educational interests of their community.

About a year ago, I was called to attend a meeting of a board of education at a country town in New York State, and after the preliminary greetings, I took a casual survey of the room and its contents. It was a private office rented for the use of the board only, and contained the various kinds of textbooks and supplies needed for the different schools of the district, all neatly arranged. But the thing that caught my eye particularly, was a framed document which hung above the table used for the transaction of the general business of the board. It had evidently been framed by the members at their last installation, as it was quite fresh in appearance.

The contents were somewhat as follows:

Whereas, We, the members of the ..... board of education, have been called by the people of this community to decide the educational questions to the best of our ability, we have jointly agreed to adopt the following resolutions, for the government of this board in all its future business transactions:

1. We shall allow no personal enmity or feeling

\*Extract from a paper by W. Clement Moore, in the AMERICAN SCHOOL BOARD JOURNAL for November, 1904, p. 6.

(Concluded on page 70)



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Table Desk S 1007 with Chair S 913

(Concluded from page 68)

to enter into the decision for or against any question brought before this board, no matter by whom the question may be raised.

2. No political question or feeling shall enter into the work of the board. We shall labor only in the interests of the schools, the people, and the community which we represent and not for any selfish motives of our own.

3. All questions regarding the positions of our teachers shall be discussed only while the board is in session. We shall endeavor to support their work and methods so far as is practicable.

4. We shall each be observant of the needs of the various schools, shall study the school laws and come to each meeting interested and ready to transact the business speedily and well.

(Signed.....)

The above may not be the exact wording of the document, but it carries the sentiment, which is the main point.

It may be appropriate to add that the transactions of that meeting were the most harmonious in every way that I ever witnessed. Each member was well informed concerning the various questions that were discussed, and as a natural consequence they were soon settled to the complete satisfaction of every member.

If the people in selecting the members to represent their educational interests would select always the person with the least political aspirations, instead of the one with the most, we would not need to fear the many little grievances and differences that are forever detrimental to the educational advancement of a community.

### *School Business Administration*

#### SCHOOL INSURANCE IN JANESVILLE

The board of education at Janesville, Wis., has recently revised its insurance policies. As announced by Supt. V. E. Klotz, the board of education is carrying five different types of insurance.

The major item of protection is against fire and includes windstorm and aircraft damage insurance. The policies protect the buildings in the sum of \$1,337,505. They are arranged on the five-year plan, one fifth of the premiums coming due each year. The policies include an 80 per cent coinsurance clause which insures the lowest rate available.

Public liability is the second type of insurance carried by the board. The policies range from \$25,000 to \$50,000 for persons who may be injured in the schools or on the school grounds. Protection of from \$25,000 to \$100,000 is also carried on the Monterey Stadium where the high-school football games are played and where the field days and outdoor events are held.

Boiler insurance is a third type of protection. The policies are for \$20,000 and give the school board the advantage of regular inspection of all school boilers.

Burglary insurance is carried on the main vault by the school board in which the records, the cash, and other valuables are preserved.

The school truck is insured for personal and property damage, with \$10,000 to \$20,000 limits for bodily injury, and \$5,000 property damage.

#### WATER LEAKAGE

Mr. Laurence Parker, writing in the *Kansas Janitor-Engineers' News Letter*, calls attention to the necessity of repairing leaky valves in school buildings. In many towns over the State of Kansas, there is a great shortage of water, and this causes a waste which is being paid for by school

boards and which might be used to good advantage in homes and other buildings.

A dripping faucet which is considered a small leak, will leak 15 gallons of water in 24 hours, or over 4,500 gallons per month. If this is multiplied by 10 faucets, all of which need the simple operation of replacing gaskets, there is a waste of 45,000 gallons in a month—a young river in itself.

School boards can make large economies if they will persistently run down any water, electric, and gas leaks. The problem is one for the busy executive in charge of building maintenance.

#### SCHOOL-BOND SALES IN 1939

A careful tabulation of school-bond sales throughout the United States indicates that the total for the year 1939 was \$85,971,792.

The largest amounts were sold in the following states:

New York State, \$26,226,208; Ohio, \$7,241,300; Pennsylvania, \$7,850,100; California, \$3,379,600; Illinois, \$3,282,000; Michigan, \$3,104,900; New Jersey, \$4,735,500; North Carolina, \$3,112,500; Texas, \$3,687,980.

No sales were reported in the states of Nevada, New Mexico, and Utah. The State of Maine reported \$49,000.

#### SCHOOL-BOND SALES

During the month of January, 1940, sales of bonds for school purposes were reported in the sum of \$9,444,700. The largest sales were made in New Jersey, where \$1,792,000 were sold; and in Pennsylvania, where sales were \$3,366,500.

During the month of January, short-term notes, tax-anticipation warrants, and other short-term paper for school purposes were sold in the sum of \$41,293,145. The State of Illinois was responsible for \$39,509,000 of these sales.

♦ The Illinois Vocational Association will hold its annual convention on March 28, 29, and 30, in the Morrison Hotel, Chicago, Ill.



## TO GET THE BEST BINDINGS BEGIN WITH THE FOUNDATION

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Therefore, the selection of the right board is all important. Fortunately, too, it is simple. Commercial Standard CS50-34, developed through the assistance of the U. S. Bureau of Standards, insures the production of Binders

Board that will meet all the requirements of textbook binding.

This standard has demonstrated its value, not only to publishers and binders, but also to purchasers, for it enables them to obtain books upon whose durability they can rely. It is only necessary for them to include this clause in their book orders:

*"Books to be bound in Binders Board made in accordance with Commercial Standard CS50-34."*

The following mills manufacture Binders Board in accordance with this Standard:

Colonial Board Co. . . . . Manchester, Conn.	Fibreboard Products Inc., San Francisco, Cal.
Consolidated Paper Co. . . . . Monroe, Mich.	
The Davey Company . . . . . Jersey City, N. J.	C. H. Norton Co., N. Westchester, Conn.
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### BOOKS BOUND IN BINDERS BOARD ARE BOUND TO LAST

#### *School Board Conventions*

##### PENNSYLVANIA SCHOOL DIRECTORS DISCUSS WORKING WIVES

A denunciation of subsidized wives gainfully employed was sounded by Miss Florence Birmingham, of Boston, before the forty-fifth annual convention of the Pennsylvania State School Directors' Association, which met in Harrisburg, on February 2 and 3.

Dr. Isaac Wright, of Allentown, presented a resolution demanding that the Department of Public Instruction be kept free from politics. Dr. Wright's plan for selection of a state school head called for the appointment of a nine-member council by the governor with approval by the senate. This body is to be empowered to choose a superintendent for the department of public instruction and to make appointments to the state teachers' colleges through civil-service regulations.

Dr. Ben Graham, of Pittsburgh, told the delegates that a general revision of the state high-school curriculums is absolutely necessary to meet the needs of boys and girls who are not academically minded. He said far too much stress is being laid on teaching of foreign languages and other college-preparatory subjects, and not nearly enough on subjects preparing youth to take positions in industrial and domestic fields.

P. O. Van Ness, executive director, told the association that the membership had grown from 816 boards in 1937 to 1,615 in 1939. The highlight of the afternoon session was the presentation of directors with a service of forty years or more on school boards.

Governor James told the school directors that the larger school districts in the state must mark time in educational development and permit the smaller districts to catch up with them if there is to be equalization of educational opportunity in the state. "Let's not insist on more advantages in

the larger districts until the smaller districts have had some advantages," he said.

Dr. Charles Copeland Smith, who discussed the problem of youth, told the directors that the most alarming aspect in America today is the defeatism of its boys and girls. He asked that they strike an optimistic attitude toward the future in their contacts with young people so that they will believe in the future.

Mr. Chester H. Gross, president of the association, warned board members against unwarranted building programs now contemplated in some districts. He urged that school boards keep free of political influences so that they may avoid the pressure which is too often applied. He suggested renewed emphasis on the teaching of the principles of constitutional government in the schools. He said that the schools should accept federal aid only in the form of outright grants, and that they should not permit the government to exert any control over the schools of the states.

Dr. Lee L. Driver was presented with a silver plaque for his services to the fourth-class districts of the state. Doctor Driver traced the developments in education during his service in the state department.

The Association adopted resolutions and proposed the setting up of a state tax commission and the establishment of the principle of a state-wide 100 per cent value assessment; urged the enactment of legislation requiring the payment of per-capita tax as a requirement to vote; suggested increased salaries of fourth-class district teachers; urged an increase in the state subsidy to school districts to relieve the tax burden on real estate; condemned un-American teaching; favored the establishment of a sound state school-building program; urged the appointment of the state superintendent of public instruction by a State Council of Education comprising nine appointed members.

Congressman Robert F. Rich told the directors that the schools' financial burdens ought to be a local problem because if the Federal Government appropriates additional money, it will be increas-

ingly hard to keep politics out of the school system.

Dr. W. A. Roberts, in his talk, declared that the most serious health problem in the schools today are the dental diseases. He said that there is a relationship between health and mental achievement and he favored a regulation covering dental health needs to get satisfactory results.

At its business session, the association elected officers for the next year as follows:

President, Dr. W. A. Roberts, Newtown; first vice-president, D. A. Best, East McKeesport; second vice-president, L. B. Stoudnour, Roaring Springs; third vice-president, D. E. Taylor, Freeport.

Regional directors named for two-year terms were: Dr. A. B. Foster, New Castle; Dr. A. R. Livermore, Smithport; Bert L. Liles, Clarks Green; and R. L. Eaton, Swarthmore.

##### UPPER PENINSULA (MICHIGAN) ASSO- CIATION OF SCHOOL BOARDS MEETS

The Upper Peninsula Association of School Boards held its annual meeting in Marquette, Mich., on February 3. Discussions on school finance featured the conference and the speakers were State Supt. Eugene B. Elliott, Supt. John Page of Howell, and Dr. A. J. Phillips, secretary of the Michigan Education Association.

The Association elected officers as follows: President, William Warmington; vice-president, W. M. Whitman, Marquette; and secretary, Keith Cheney, Grand Marais.

##### NORTH CAROLINA SCHOOL BOARDS WILL MEET IN CHAPEL HILL

The North Carolina State School Board Association will hold its annual meeting April 4, in Chapel Hill.

The theme of the meeting will be "Next Steps in Education in North Carolina." Among those who will appear on the program will be Dr. Howard Dawson, and President H. E. Stacy. A number of reports will be presented by the several committees in charge of special duties.



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### PENNSYLVANIA SCHOOL SECRETARIES CONVENE IN HARRISBURG

More than 900 district secretaries from all parts of the state were in attendance at the annual convention of the Pennsylvania School Secretaries, held in Harrisburg, on February 2.

Among the speakers on the program were Dr. Francis B. Haas, State Superintendent of Public Instruction, and Dr. Arthur E. Nestor. Doctor Nestor said, "Liberalism and Democracy are in retreat, but are they on the way out? The democratic nations are still potentially strong; they have tremendous resources and they can still unite. The essential characteristics of the American way of life have been individual freedom, religious, political, economic, social; widespread prosperity, and a higher standard of living."

Dr. Isaac Miles Wright recommended that, in order to keep the state department out of politics, a state-wide council of nine members be appointed by the governor with the approval of the senate. The Council would appoint the superintendent and make appointments to the state teachers' colleges and other state educational institutions.

Among the resolutions considered by the association were:

1. That the governor issue a call for a special session, to provide additional aid for distressed school districts.

2. That legislation be enacted permitting a board to pay for tubercular examinations of teachers, pupils, and employees whenever necessary.

3. That the highways department keep all highways open for school buses.

Another suggestion was that all vehicles be required to halt when coming upon a school bus proceeding in the same direction.

The subject of married women was discussed

and it was urged that the rules be amended to give a school board the right to dismiss married female teachers if desired.

The Association elected Howard W. Cramblet of Pittsburgh as president. Miss Mary E. Robbins of Sunbury was re-elected secretary, and John J. Schiedel of Upper Darby was elected vice-president.

### CONNECTICUT SCHOOL SUPERINTENDENTS WILL MEET IN HARTFORD

The Connecticut Association of School Superintendents held its annual meeting in Hartford, on February 1. At the meeting a number of reports on activities of the several committees were presented. Mr. Alonzo G. Grace, State Commissioner of Education, gave a talk.

### KENTUCKY SCHOOL BOARDS WILL MEET IN LEXINGTON

The Kentucky State School Board Association has announced that its annual convention will be held April 18, at Lexington. Mr. H. B. Sherman, of Carrollton, will preside, and Dr. L. E. Meece, professor of school administration, at the University of Kentucky, will act as secretary.

### BOARDS OF EDUCATION

♦ A central school warehouse has been established in Knoxville, Tenn., where an old school building had become available. The building provides space for a warehouse, a school repair shop, and a library. One large room is used for the office of the library cataloger and two assistants. Over 7,000 pieces of reading material are stored here and any teacher is allowed to select titles for her students.

♦ Cambridge, Mass. The school board has approved a suggestion that the school department offices be removed from the city hall to larger quarters in one of the school buildings. It is planned to use the Harvard School where sufficient space is available for the purpose.

♦ Akron, Ohio. The board of education has adopted a new policy which provides that local

bidders will be favored in school purchases when their prices are not above 5 per cent higher than the lowest out-of-town bidder. In the past, the board's policy with respect to favoring local bidders had not been clearly defined. It was contended that local concerns which pay taxes and support the people should be favored whenever possible.

♦ Toledo, Ohio. The Toledo Central Labor Union has opposed school-board economies at the expense of school employees, particularly as regards wages, working conditions, and personnel. Representatives of the labor-union groups have refused to accept any of the four proposals submitted by the school board to effect savings in the school system. The group favored a special school levy and offered to support a local campaign in favor of a levy to be submitted at a special election.

♦ St. Louis, Mo. The board of education has begun a search for a man of national prominence to replace former superintendent Henry J. Gerling, whose resignation was recently accepted. It is proposed that a committee be appointed to suggest six outstanding educators as candidates for the position. Mr. George L. Hawkins, assistant superintendent of schools, has been appointed acting superintendent to serve until a permanent superintendent is named.

### INDIANA TOWN AND CITY SUPERINTENDENTS WILL MEET

The officers of the Indiana Town and City School Administrators' Association will hold a number of regional meetings.

These meetings will be held in East Chicago, with Roy F. Feik as chairman; in Fort Wayne, with Merle J. Abbett as chairman; in Winamac, with Earl D. Roudebush as chairman; in Greencastle, with Paul F. Boston as chairman; in Madison, with E. O. Muncie as chairman; in Evansville, with J. Ralph Irons as chairman; in Rushville, with L. A. Lockwood as chairman; and in Bloomington, with H. E. Binford as chairman.



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## Teachers' Salaries

### GREENFIELD SALARY SCHEDULE

The board of education of Greenfield, Mass., has adopted a new salary schedule which allows credit for the teacher's education and professional training. The schedule for elementary- and junior-high-school teachers became effective in September, 1939, while that for the senior high school goes into effect in September, 1940.

Under the schedule, each teacher on tenure will receive an annual automatic increase of \$50 per year until the maximum for her classification is reached. Teachers not on tenure will be given annual increases of \$100 per year until the maximum of \$1,300 for elementary teachers, \$1,400 for women junior-high-school teachers, \$1,500 for women senior-high and men junior-high-school teachers, and \$1,600 for men senior-high-school teachers is reached.

In the junior high schools, women teachers with two years' professional training above the high school and one-sixth approved teacher training will be paid \$1,500 and with further training will work up to \$1,800. Men teachers will begin at \$1,700 and work up to \$2,000. In the senior high school, women teachers will begin at \$1,600 and work up to \$1,900, and men teachers will begin at \$1,700 and work up to \$2,300. The maximum salary for men teachers in the vocational school is \$2,300, and for women teachers \$1,900.

After reaching the maximum salary, all teachers must continue professional study approved by the superintendent, by securing a minimum of four hours of college credit every five years. If this requirement is not met by the teacher, she will automatically lose \$100 for each five-year period which elapses. Each teacher will be paid \$50 for the completion of a summer course of not less than four semester hours of work, or the equivalent in other professional work.

Principals in elementary schools will receive \$15 per room in addition to the salary to which they would be entitled.

Teachers of mentally retarded groups of pupils, requiring special treatment, will receive a maximum salary \$100 higher than that to which they are entitled under the general rules.

### NEW CHERRYVALE SALARY SCHEDULE

The board of education of Cherryvale, Kans., has adopted a new salary schedule, which provides minimum and maximum qualifications and is applicable to all teaching positions.

For grades K-1-6, the minimum salary will be \$85 per month for beginning teachers, and \$95 for experienced teachers, with annual increments of \$5 per month up to a maximum of \$105 per month for a standard degree trained teacher.

For grades seven to twelve, the minimum salary will be \$110 per month for beginning teachers, and \$120 for experienced teachers, with increments of \$5 per month up to a maximum of \$135 for single men and women, and \$145 per month for married men.

Under the rules, there is no distinction between single men and women as to salary. No married man will receive less than \$120 per month for a nine-month term. Married men with dependent children will be given \$5 per month for each child under sixteen years up to three children. Married men with a master's degree will be given a minimum salary of \$130 per month. Widows and widowers designated as heads of families with dependent children will receive allowances granted for dependents.

All teachers, under the rules, will be eligible to leaves of absence for advanced professional training, and will retain all rights and privileges, except that they will not receive pay while absent. All teachers must attend a summer school, or travel, in order to obtain or retain a maximum salary.

Inexperienced teachers entering the system for

the first time will be placed on a probationary basis. Regular teachers must have two or more years' experience and must obtain a standard degree from a recognized college or school of education offering teacher training.

Ten days on full pay will be allowed each teacher for personal illness. One day may be added to the ten for each year served without absence.

### TEACHERS' SALARIES

♦ Knoxville, Tenn. Under a resolution adopted in December, 1939, the salaries of the teachers of the white and colored races were equalized. Three other cities in the South are paying Negro teachers the same salaries as white teachers.

♦ Bridgeport, Conn. The board of education has voted to reduce the salaries of substitutes. High-school substitutes will be paid \$5 per day, instead of \$6, to conform to the salaries of grade teachers.

♦ Eau Claire, Wis. The school board has approved in principle a request of the teachers' association for a salary schedule, based on a plan prepared by a committee of teachers. The schedule to be adopted provides for minimum and maximum salaries, with increases of \$50 per year to teachers after the first two years of teaching until the maximum is reached.

♦ Superior, Wis. The school board has proposed a new teachers' salary cut of 10 per cent. The cut would be over and above all other cuts and would reach \$45,000.

♦ Gary, Ind. Increases in teachers' salaries amounting to more than \$18,000 have been ordered for 1940 by the board of education.

♦ Anderson, Ind. In April, 1940, with the issuance of teachers' contracts, the school board will complete the final step of a three-step single-salary schedule. Under the schedule, all teachers receive the same salary, provided experience and training are comparable.

♦ The Nebraska Teachers' Association is sponsoring a teachers' retirement bill in the legislature, at its next session in 1941.





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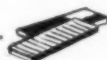
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## School Finance and Taxation

♦ Findlay, Ohio. The board of education has adopted a budget of \$308,000 for the maintenance and operation of the schools in 1940. This is an increase of \$5,000 over the estimate for 1939-40.

♦ Buffalo, N. Y. The school board has adopted a tentative budget of \$10,400,000 for the operation of the schools in 1940.

♦ Xenia, Ohio. The school board has approved appropriations of \$138,000 for the operation of the schools, and \$50,000 for bond and interest funds in 1940. The board has proposed a WPA program for playground and other improvements at six schools.

♦ On January 20, 1940, the citizens of Dist. 217, of Argo, Ill., approved a proposal calling for an increase of 62 cents in the tax rate, which is intended to offset a shortage in the operating income of the schools.

The board of education has faced the problem of operating the schools with an income inadequate to meet the expenditures, which have been kept to a minimum. The situation has been attributed to the fact that the tax income of the district had decreased \$35,000 in 1939 as compared with the collection of taxes in 1928. The total drop in the amount of money available for school expenses is \$279,968. While the financial source had dropped \$279,000 in a period of ten years, the enrollment had increased 168 per cent during the same time.

The raise in the tax rate is expected to increase the tax income sufficiently to operate the schools. Even with the increase, the income of the schools will be \$10,000 less than in 1928-29.

♦ Knoxville, Tenn. The school board of the city has announced substantial savings in the cost of electricity through the operation of a new municipally owned electric light and power department. In a study of comparative costs for the

year before and since the city acquired the plant, the light and power bills have been reduced from \$1,714.28 to \$915.69.

♦ Peoria, Ill. Cafeterias in the junior and senior high schools have reported a loss of \$202.65 during one month, bringing their total deficit of the school year to \$765.45. Mr. L. O. Boyle, supervisor of cafeterias, reports that the cost of operation for four months of the year was 39.2 per cent of the income, which is higher than it should be. One high school was able to show a profit, and four suffered losses. The board authorized the supervisor to make any changes necessary to effect cost reductions.

♦ Canton, Ohio. The school board has adopted a tentative budget, calling for \$1,864,281 for the year 1940. The largest item in the budget is \$1,519,000 for salaries of teachers, janitors, and school officers.

♦ Toledo, Ohio. The board of education has authorized the fiscal department to obtain a loan of \$500,000 on its anticipations from the 1940 tax collections. The money will be used to pay back salaries of school employees. As a preparation for an attack upon the deficit, the board has instructed the clerk to apply to the state tax commission for permission to float a \$600,000 bond issue. The bonds would be predicated on delinquent local taxes and would replace a similar funding issue floated in 1933 to absorb a deficit.

♦ Somerville, Mass. The board of education has prepared a budget for 1940, calling for \$1,407,339. The largest item is \$1,319,266 for salaries, which is an increase of \$21,000 over last year. The new budget allows salary increases of \$100 for 39 teachers and \$50 for seven teachers.

♦ Rockford, Ill. Facing a deficit of \$200,000, the board of education has proposed the elimination of the activities of athletics, music, art, and industrial arts. It is estimated that \$40,000, or one fifth of the deficit would be eliminated through this economy measure.

♦ Oklahoma City, Okla. A net saving of \$133,195 in school instructional employees' salaries will be effected for the 1939-40 school year through

a reduction of 106 employees. Ten new teachers and clerks have been added to the staff, with an addition of \$7,400 in salaries. The increase of \$8,675 reduced the total saving from \$141,870 to \$133,195.

♦ Fall River, Mass. A budget of \$1,417,448 has been adopted by the school board for the year 1940. The budget includes \$50,000 to be expended for the Lord Junior High School addition.

♦ Lynn, Mass. The school board has prepared a budget of \$1,511,571 for 1940, which is an increase of \$5,000 over the expenditures for 1939. The larger budget will call for a 35-cent increase in the tax rate.

♦ Worcester, Mass. The school board has prepared a budget for 1940, calling for a total appropriation of \$3,083,540, which is an increase of \$75,291 over the estimate for 1939. The budget provides an increase of \$43,000 in the salary item, and \$5,000 additional for the salaries of clerks, teachers, and executives.

♦ Superior, Wis. The board of education, which is faced with a \$66,000 deficit, has adopted economies totaling \$42,206. The economies were attained by cutting two weeks off the school year, by transferring junior-high-school and ninth-grade classes to two other schools, and by making radical reductions in the purchase of supplies and equipment. It is estimated that the consolidation of the two schools will effect a saving of \$20,000 during the calendar year 1940. The reduction in teaching personnel due to the consolidation will save \$10,000.

♦ New York, N. Y. The board of education has adopted a preliminary tentative budget of \$158,095,698 for the school year 1940-41. The board asked for \$5,041,883 more than was granted in the budget of 1939-40, though the school system has been operating on a budget of less than \$147,000,000 because of a cut in state aid money. Of the total amount, \$53,415,187 will come from the state, and \$104,680,511 from the city. The city is to be called upon to pay \$9,539,089 more than it did for the last school budget, when it granted \$95,141,421.



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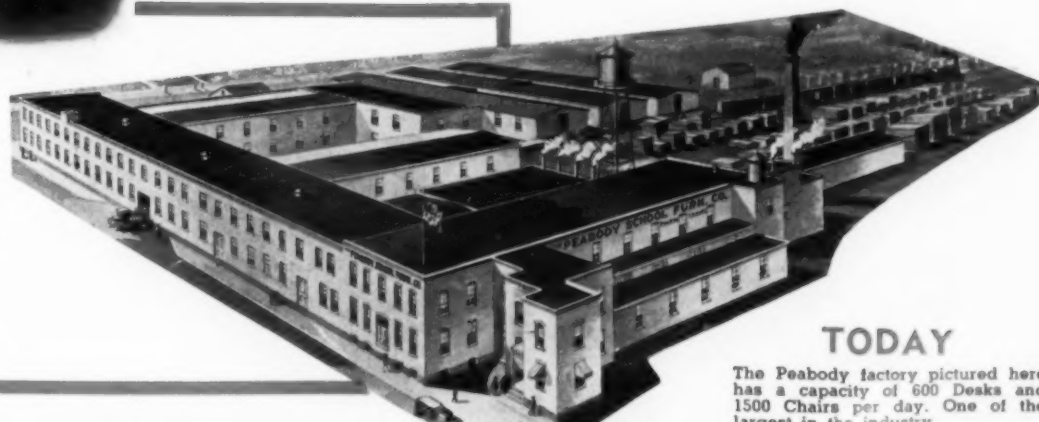
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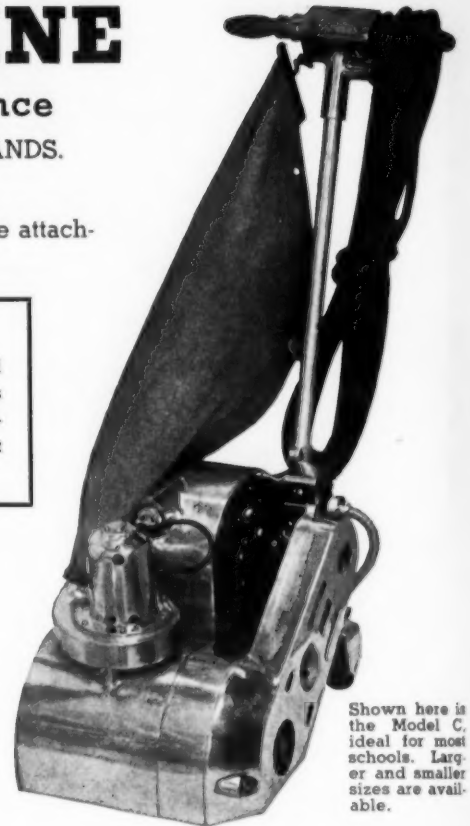
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Shown here is the Model C, ideal for most schools. Larger and smaller sizes are available.

## FINANCE

♦ Kenosha, Wis. The board of education has adopted a salary reduction schedule which is expected to produce a saving of \$32,000. The reductions range from 3 to 12 per cent, with a minimum of \$1,400.

With additional economies to be enforced during the school year 1940, it is estimated that an additional \$41,000 will be saved. The reductions were ordered following the cutting from the budget of \$86,000 by the city council.

♦ Sioux City, Iowa. The board of education has voted to retire \$207,000 of the principal of the school indebtedness during the year 1940-41, in keeping with a plan to make the system debt free by 1946. The board has voted to buy \$7,500 of United States savings bonds, which will be worth \$10,000 in ten years.

♦ The school board of the Sandwich Township high-school district, in Sandwich, Ill., on April 1, will complete the bond payments on a bond issue for the financing of a school building. Despite a loss in the tax base, no school activities have been discontinued, salaries have been maintained, and there has been no need for a refinancing of the bonded indebtedness.

♦ Dayton, Ohio. The board of education has adopted a budget of \$4,202,150 for the school year 1940, which is an increase of \$440,246 over the year 1939. Of the total amount, \$3,292,040 will be used for the general fund for current operation, and \$910,110 for bond retirement and interest.

The principal amount of the increase is accounted for in the planned expenditure of \$320,000 for an additional month of school during the year. The schools were operated eight months and nine days in 1939, as compared with the nine months planned for the fiscal year 1940. The larger budget returns the school system to the level of 1938 expenditures, and was made possible by the passage of a two-mill tax-operating levy for one year, which is expected to produce \$550,000 on the basis of an 85 per cent collection of the levy. Besides financing an extra month of school, the extra levy will permit modification of

some of the drastic economies effective during the past year, particularly in the replacement of textbooks and educational supplies.

♦ Houston, Tex. The 1940 budget of the board of education calls for \$6,275,000, which establishes a new all-high record. The most ever spent in any one year was in 1938, when the total reached \$6,011,896. The largest item is \$4,276,000 for instruction, which includes teachers' salary increments and salaries of 50 new teachers.

♦ Woburn, Mass. The school board has adopted

a budget of \$301,466 for the year 1940. Last year the budget was cut from \$296,000 to \$256,000 by the mayor, which caused a shortage of 20 per cent in the salary account.

♦ Brookline, Mass. The school board has adopted a budget of \$953,309 for the year 1940, which is a reduction of \$5,633 from the estimate of 1939. The board has asked the town to appropriate \$36,000 for a new gymnasium, \$2,000 for landscape work, and \$15,000 for sprinklers and fire-alarm equipment.



Members of the Board of Education of Rittman, Ohio. Front: Mrs. Bessie Schumacher, clerk; Hon. W. W. Schwartz, president. Standing, left to right: Harold Brown, vice-president; Homer Forrer; Boyd Miller; Melvin Ritter. — Photograph by Rittman Press.



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Springfield, Mass.	Fort Wayne, Indiana
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Buffalo, N. Y.	Lexington, Ky.
Binghamton, N. Y.	Detroit, Mich.
New York City	Chicago, Ill.
Trenton, N. J.	Moline, Ill.
Newark, N. J.	Minneapolis, Minn.
Camden, N. J.	Cedar Rapids, Iowa
Pittsburgh, Pa.	St. Louis, Mo.
Scranton, Pa.	Kansas City, Mo.
Philadelphia, Pa.	Aberdeen, So. Dak.
Baltimore, Md.	Omaha, Nebr.
Norfolk, Va.	Wichita, Kansas
Richmond, Va.	Oklahoma City, Okla.
Wilmington, Del.	Salt Lake City, Utah
Clarksburg, W. Va.	San Francisco, Calif.
Winston-Salem, N. C.	Los Angeles, Calif.
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ARCHITECTS and ENGINEERS  
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Chicago

January 5th, 1940

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737 N. Michigan Ave., Rm. 420  
Chicago, Illinois

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Yours very truly,

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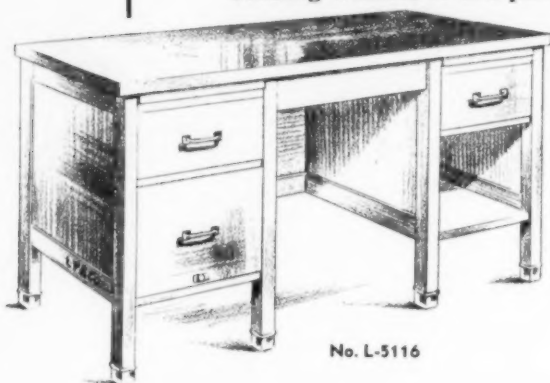
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### School Law

#### Special Meeting

The Kansas statute providing that special meetings may be called by the board of directors of a school district is permissive rather than peremptory, under a ruling of the Supreme Court of Kansas.<sup>1</sup>

#### Members May Bind Successors

Where power is granted by statute to a school board to act for a period of time, those lawfully in office may bind their successors, according to a ruling of the Ohio Supreme Court.<sup>2</sup>

#### Board Affairs at Valid Meeting

All of the public or corporate affairs of a school board must be transacted in substantially the manner pointed out by law, under a ruling of the Oregon Supreme Court.<sup>3</sup>

#### Powers Exercised by Members

The affairs of a school board can be transacted only at a valid board meeting, and the legislative and discretionary powers of the board can be exercised only by the coming together of the members who compose it, or those who are its duly constituted representatives.<sup>4</sup>

#### School Board as Entity

The existence of a school board is as a board of entity, and the members thereof can do no valid act, except as a board, according to the ruling of the Ohio Supreme Court.<sup>5</sup>

<sup>1</sup>Bradley v. Cleaver, 95 Pacific reporter 2d 295, 150 Kan. 699.

<sup>2</sup>State ex rel. Rees v. Winchell, 23 Northeastern reporter 2d 843, 136 Ohio St. 62.

<sup>3</sup>McBee v. School Dist. No. 48 of Clackamas County, 96 Pacific reporter 2d 207, Ore.

<sup>4</sup>Ibid.  
<sup>5</sup>Ibid.

#### Informal Discussions Properly Excluded from Minutes

Informal discussions and offhand conversations of members of the board of school directors of a school district representing their intent, if any, to move school activities from a certain schoolhouse to a contemplated new schoolhouse in the district, were properly excluded by the clerk of the district from the minutes of the board of education, according to a recent decision of the Oregon Supreme Court.<sup>6</sup>

#### Courts and School-Board Authority

The courts can interfere with the exercise of the authority of school boards only when the boards disregard their authority and pursue an unauthorized course, according to a decision of the Oregon Supreme Court.<sup>7</sup>

#### Board Must Act Lawfully

In order to bind a school district, the school board must be duly assembled and must act in the mode described by the law of its creation, evidenced by an order entered on record, and such act must ordinarily be by resolution or something equivalent.<sup>8</sup>

#### Materialmen Entitled to Payment

The Texas Appellate Court has ruled that a materialman furnishing materials to a subcontractor employed in the erection of a school, is entitled to recover payment out of funds owed by the school district to the general contractor, although the general contractor had paid the subcontractor all it owed him under the subcontract.<sup>9</sup>

#### Teacher's Health

A school district in Oregon, under a ruling of the Supreme Court, has implied power to determine by physical examination whether an applicant for a teaching position is afflicted with a

<sup>6</sup>Ibid. <sup>7</sup>Ibid. <sup>8</sup>Ibid.

<sup>9</sup>Joe Huggins Lumber Co. v. Goose Creek Independent School Dist., 133 Southwestern reporter 2d 207, Tex. Civ. App.

communicable disease or is incapable of discharging his or her duties.<sup>10</sup>

#### Legislature Can Employ Teachers

Education being a governmental function, the legislature of Tennessee can directly, without intervention of a city, employ the entire city force of teachers on such terms as it may see fit, according to a decision of the Tennessee Supreme Court.<sup>11</sup>

#### Civil Service Constitutional

An act amending the city charter of Knoxville and providing a civil-service system for the city schools is not unconstitutional, according to the Tennessee Supreme Court, because it grants teachers special privileges other than those conferred by the general laws of the state.<sup>12</sup>

#### No Dismissal Because of Marriage

A teacher who was entitled to permanent tenure under the Tennessee statute, cannot be dismissed by the board of education on her marriage, where the statute did not give marriage as a cause for dismissal.<sup>13</sup>

#### Cannot Divulge Health Status

Commissioner Frank P. Graves, of New York State, has rendered a decision in which he holds that, except in cases of contagious or infectious disease, the medical board of the New York school board may not legally divulge the physical or mental status of a teacher.

The decision was given in the case of Miss Mary B. C. Byrne, who was ordered dismissed by the board of education in November, 1939, because she refused to appear before the board's medical staff. Dr. Graves upheld Miss Byrne on every count and ordered her reinstated, with full pay for the time of her suspension.

<sup>10</sup>School Dist. No. 1, Multnomah County v. Teachers' Retirement Fund Ass'n. of School Dist. No. 1 of Multnomah County, 95 Pacific reporter 2d 720, Ore.

<sup>11</sup>City of Knoxville v. State ex rel. Hayward, 133 Southwestern reporter 2d 465, Tenn.

<sup>12</sup>Ibid. <sup>13</sup>Ibid.



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## School Building News

♦ Burley, Ida. The board of education has completed the erection of an industrial-arts building. The building which is located at the rear of the junior-senior high-school building, has enlarged the capacity of the school, and represents an expenditure of \$16,000. The building provides facilities for an extended industrial-arts program for 250 boys in shop classes, and 125 boys in agriculture, and affords space for two shoprooms and one classroom for agriculture.

♦ The citizens of Edwardsville, Ill., recently voted approval of two proposals for increasing the housing facilities of the school plant. Approval was given to build an addition to the Lincoln School to provide a four-year high school, and authority was given to raise \$20,000 in bonds to finance the construction work.

♦ Nevada, Mo. The school board has decided to revise its school insurance program to conform to the recommendations of Dr. N. E. Viles of the State Education Department. It is expected that the new program will result in a saving of approximately \$300 per year on insurance premiums.

♦ A new high school and civic auditorium was occupied at Everett, Wash., on December 21, 1939. The new building which houses the gymnasium and auditorium of the high school, contains facilities for physical-education work for boys and girls, and an auditorium which is fireproof, fully equipped, and acoustically perfect. The building was completed at a cost of \$445,000, of which \$200,250 was in the form of a PWA grant, \$164,750 was provided through a local tax levy, and \$80,000 was obtained from a building reserve fund.

♦ Coventry, R. I. Supt. R. E. Campbell has issued instructions to teachers and principals, urging that all possible fire hazards be removed from classrooms, that all exits be kept free and

open, and that regular fire drills be held. While no particular danger exists in the schools, the action was taken to guard against a dangerous situation which might develop.

♦ Newberg, Ore. The board of education has completed the erection of a new high-school building.

♦ Jackson, Miss. The school board has taken steps toward the formulation of a school-building program, to involve an expenditure of approximately \$600,000. The program calls for the demolition and construction of three schools, and additions and repairs to additional buildings.

♦ St. Louis, Mo. The building department of the public schools will be completely reorganized to eliminate the abuses which have been revealed as a result of the recent investigation. The auditors, Boyd, Cronk & Co., have been employed by the board to work with Building Commissioner Joseph P. Sullivan in establishing the new system. The reorganization is to be effected by April 1. In connection with the changes, a new schedule of construction procedure will be devised to be used in school-building operations.

♦ River Forest, Ill. The board of education has begun plans for the remodeling of a school building for use as school administration offices. An auditorium will be provided on the second floor to serve community purposes.

♦ Vandalia, Ill. The school board will shortly begin construction on a new elementary school, to cost \$85,000.

♦ Guthrie, Okla. A representative of the state education department has been delegated to make an academic and building study of the city school system.

♦ Anderson, Ind. A new elementary school, costing \$155,000, was completed and occupied for the first time in January, 1940. An elementary and junior high school was occupied in September. This building, which comprises 21 rooms and an auditorium, cost \$180,000.

♦ Madison, Ind. The board of education has completed the remodeling and enlarging of the school gymnasium, at a cost of \$90,000.

♦ Bowler, Wis. The contract has been let for a grade- and high-school addition, to cost \$110,000.

♦ Storm Lake, Iowa. The voters have approved a \$100,000 school-bond issue for the construction of a new grade school.

♦ Winnfield, La. The Winn parish school board has received bids for the construction of an elementary school, to cost \$175,000.

♦ Thief River Falls, Minn. The school board has approved a new insurance program, which distributes \$496,500 worth of fire and tornado insurance among seventeen insurance agencies. The amount of the insurance was increased from \$256,000 to \$496,500 because of the construction of a new building.

♦ The new Montpelier-Harrison Township school, in Montpelier, Ind., was opened for the first time in September, 1939. The building which contains eight classrooms, a recreation room, and offices, was completed at a cost of \$66,000, of which the Federal Government granted an allotment of \$30,016.

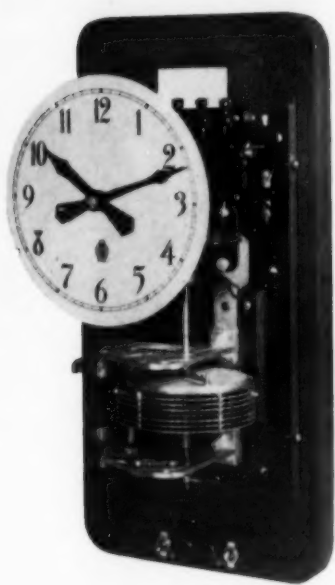
♦ Goshen, Ind. A new elementary school, erected as a PWA project, has been completed at a cost of \$192,500. Of the total cost, the Federal Government provided a grant of 45 per cent.

♦ Oklahoma City, Okla. The school board has proposed a change in the policy of paying architects 2 per cent for the inspection and supervision of new school construction work. Formerly, architects were paid a fee of 6 per cent for complete service, or 4 per cent for plans, and 2 per cent for inspection and supervision.

♦ Columbus, Ga. The school board has voted to install automatic fire-alarm systems in all schools where they are not now in use. The systems are a safeguard against fires and in two recent instances served to prevent bad fires.

♦ Cleveland, Ohio. The school board has voted to approve a WPA school painting project, estimated to cost \$228,258. The project will employ 300 men for a period of five months and will include 22 school buildings.

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### BUILDING NEWS

♦ The PWA has helped to construct a variety of educational building projects in the State of Minnesota, at a cost of \$32,345,497, according to R. A. Ratford, regional director at Omaha, Nebr.

The building program in the past six years, said Mr. Ratford, has resulted in 281 new or improved buildings, and 1,217 classrooms in the state school system. Among the major projects were a high school in Rochester, costing \$839,000; a building program in Albert Lea, costing \$646,000; an elementary school and additions to the high school in Stillwater, costing \$540,417; and a new elementary school and additions in St. Paul, costing \$702,500.

♦ Harlan, Ky. The county board of education of Harlan County has sponsored a wide-range building program during the past five years. More than a half million dollars' worth of new buildings, gymnasiums, and football fields have been completed or are under construction.

♦ Miami, Fla. The board of education has begun the construction of a junior-high-school building, to comprise 35 classrooms, a library, a cafeteria, and manual-training and domestic-arts departments. The building will be completed at a cost of \$300,000, of which the PWA will furnish its share. The building will be erected in four units, of which the first unit will comprise twelve classrooms and toilets.

♦ Fall River, Mass. A blanket school department project, to cover WPA projects planned during the next fiscal year has been presented to the state WPA authorities for approval. The complete program totals \$724,662, of which the Federal Government is to contribute \$502,563, and the city \$220,099.

♦ Carthage, Tenn. A school-bond issue of \$100,000 has been sold, the proceeds to be used for the construction of a high school.

♦ Barnesville, Ohio. The school board has received bids for the construction of a school, to cost \$100,000.

♦ Cleveland, Ohio. The board of education has approved a WPA painting and renovating pro-

gram for 22 schools, to involve an expenditure of \$228,258.

♦ Flagstaff, Ariz. The taxpayers have approved a school-bond issue in the amount of \$113,000. The proceeds of the bond issue will be used to construct a twelve-room elementary school costing \$75,000, and an addition to the high school costing \$38,000. The plans for the building are in

charge of Messrs. Lescher & Mahoney, architects, Phoenix, Ariz.

### SCHOOL-BUILDING CONSTRUCTION

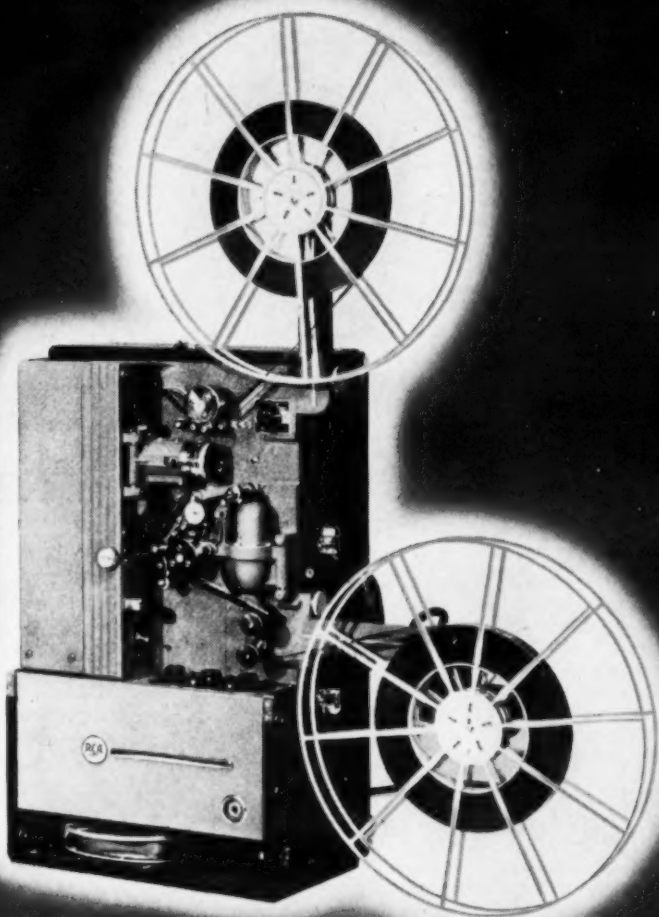
During the month of January, Dodge reports contracts let in 37 states east of the Rocky Mountains, for 140 educational and science buildings, at a total valuation of \$6,057,000.



Toledo's new Board of Education, which is struggling with the heavy problems of adjusting finances and the school program. Beginning at the left: Mrs. Opal Mundy; Grant Murray; Ralph B. Millard; Edward E. Evans; Eldon H. Young.—Photograph, Toledo Blade.



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See the exclusive features which put this simplified unit for schools YEARS AHEAD!

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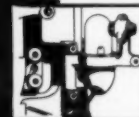
**3. BETTER, MORE EFFICIENT COOLING.** Blower scroll in this compartment cools lamp, amplifier and aperture gate. Lamphouse is only slightly warm while projector is operating, thus increasing lamp life. Lamp may be quickly and easily removed.



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**7. BETTER OPERATING EASE.** All controls conveniently located and grouped for easy operation. Loss of film loop quickly adjusted without stopping projector.



**8. BETTER INPUT PERFORMANCE.** Input jack permits use of high impedance microphone or Victrola attachment with magnetic or crystal pick-up. Speech input may be used with either sound or silent films.

**9. BETTER REPRODUCTION.**

**10. BETTER FRAMING.**

**11. BETTER TONE.**

**12. BETTER ACCESSIBILITY.**

**13. BETTER VERSATILITY.**

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**15. BETTER LAMP SERVICE.**

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SILER CITY

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NORTH CAROLINA

## Teachers and Administration

### THE RHODE ISLAND TEACHERS' PLEDGE

Under the state school law, teachers in the State of Rhode Island take the following oath of loyalty:

I, as a teacher and citizen, pledge allegiance to the United States of America, to the State of Rhode Island, and to the American public school system.

I solemnly promise to support the constitution and laws of the Nation and State, to acquaint myself with the laws of the state relating to public education, and also the regulations and instructions of my official superiors, and faithfully to carry them out.

I further promise to protect the school rights of my pupils, to conserve the democracy of school citizenship, to honor public education as a principle of free government, to respect the profession of education as public service, and to observe its ethical principles and rules of professional conduct.

I pledge myself to neglect no opportunity to teach the children committed to my care loyalty to the Nation and State, honor to the flag, obedience to law and government, respect for public servants entrusted for the time being with the functions of government, faith in government by the people, fealty to the civic principles of freedom, equal rights and human brotherhood, and the duty of every citizen to render service for the common welfare.

I shall endeavor to exemplify in my own life and conduct in and out of school the social virtues of fairness, kindness, and service as ideals of good citizenship.

I affirm, in recognition of my official obligation, that, though as a citizen I have the right of personal opinion, as a teacher of the public's children I have no right, either in school hours or in the presence of my pupils out of school hours,

to express opinions that conflict with honor to country, loyalty to American ideals, and obedience to and respect for the laws of Nation and State.

In all this I pledge my sacred honor and subscribe to a solemn oath that I will faithfully perform to the best of my ability all the duties of the office of teacher in the public schools.

### TEACHERS AND ADMINISTRATION

♦ Covington, Ky. The school board has passed a rule, providing that four years of college will constitute the minimum requirement for teachers to be employed in the future. Prior to this, elementary teachers were obliged to have two years of college work, and high-school teachers were required to have a bachelor's degree.

♦ Milwaukee, Wis. The school board recently held up the appointments of 200 probationary teachers, who were completing their fifth semester of service, because 59 had not taken the health examinations required by the board. The teachers were notified that they would not be considered unless their health certificates were placed on file. To date 45 of the teachers had arranged for examinations and it is expected that the remainder will comply.

♦ Holyoke, Mass. Mr. Walter Griffin, a new member of the school board, has endeavored to make a change in the system of selecting teachers for the local schools. The matter came up for discussion when an appointment of a member of the staff was made by the superintendent, but failed to have the approval of the board. Mr. Griffin intimated that he would try to get the rule changed so that the approval of the board would be necessary in all appointments.

♦ Teachers in Michigan who lost their certificates recently through failure to file oaths of allegiance must apply for new certificates, according to State Superintendent Eugene B. Elliott. The State Board has announced that it will issue special certificates in meritorious cases.

♦ Fall River, Mass. Supt. Hector Belisle has proposed a change in the plan of selecting teachers. An amendment to the rules is proposed which

would consider the qualifications of applicants, pick the best fitted aspirant, whose name would be submitted to the board by the superintendent for acceptance or rejection.

♦ Somerville, Mass. The school board has proposed the giving of professional increments, ranging from \$50 to \$100, to 46 teachers. The increases will be included in the budget for 1940 which has been increased by \$21,000 in the salary item alone.

♦ The teachers of Morrison, Ill., since April, 1938, have been receiving the benefits of a salary schedule, which takes into consideration education, amount of professional preparation, and branch of the service in which the teacher is employed. The schedule sets up minimum qualifications and the board reserves the right to change it at any time to award teachers for superior service in teaching.

In the grade schools, teachers with 60 semester hours of professional study begin at a minimum of \$810 and work up to a maximum of \$1,110. Those with 90 semester hours of work begin at \$935 and work up to a maximum of \$1,245. Those holding a master's degree begin at \$925 and work up to a maximum of \$1,325.

In the high school, teachers with a bachelor's degree begin at \$1,080 and work up to \$1,480. Those with 4½ years of credited experience begin at \$1,080 and work up to a maximum of \$1,580. Those with a master's degree begin at \$1,125 and work up to a maximum of \$1,725.

♦ Prophetstown, Ill. The teaching staff of the city schools has for the past five years enjoyed the benefits of a salary schedule which allows credit for training and years of experience. The schedule allows annual increases up to the maximum for each group of the service.

♦ Superior, Wis. The school board has reaffirmed its retirement policy, under which all employees included in the state retirement system for teachers who become 67 years of age before the close of school in June, 1940, shall retire at that time. Other teachers who will become 56 years of age before June, 1941, will retire then.



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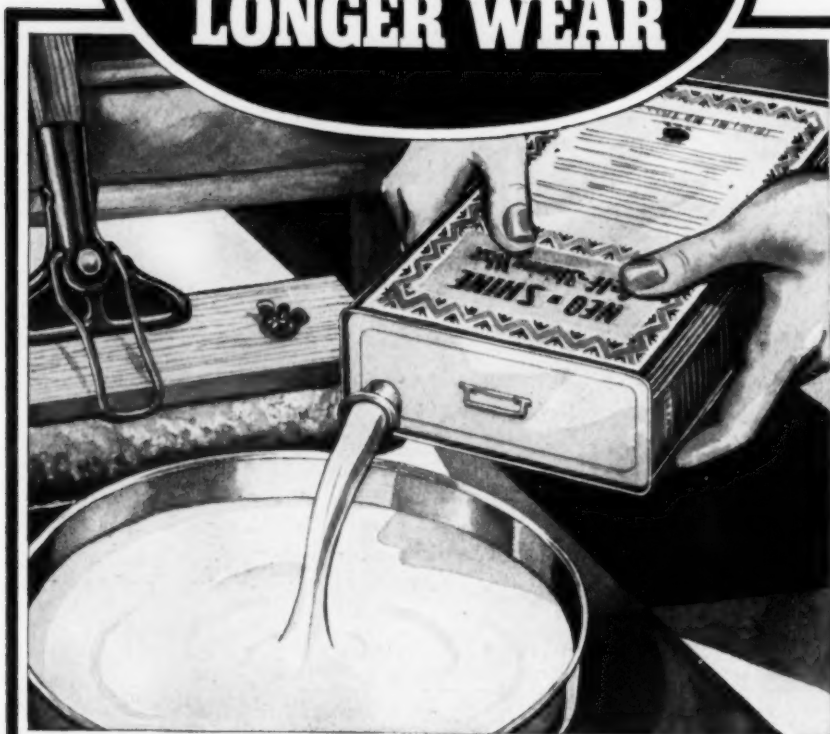
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### *School Administration News*

♦ Newton, Kans. An adult-education course, sponsored by the Kansas WPA, has been established by the board of education. All persons sixteen years of age and over are eligible to attend.

♦ Palmyra, N. J. The guidance department of the schools, in cooperation with a member of the faculty, recently presented a group of talks to the eighth-grade students, to acquaint them with the high-school courses and to offer them an opportunity to make a better choice of subjects. The first talk in January, covered the high school in general as to social and athletic activities and scholarship. The schedule included such topics as scientific, agricultural, commercial, classical, and practical arts courses.

♦ Crescent City, Ill. The voters have approved a proposed four-year high school. A board of education, comprising five members, will be elected shortly.

♦ Rockford, Ill. Supt. S. H. Berg, in a report to the board of education, has proposed an arbitrary reduction of the number of elementary teachers from 187 to 160, with an estimated saving of \$41,634. The proposal is one of a number of economy measures which are to be formulated.

♦ Manistee, Mich. The school board has shortened the academic school year by two weeks, in order to effect a saving of \$5,000.

♦ Tulsa, Okla. A course in aviation has been established in the evening school, beginning with the second semester. A trained flight instructor is in charge of the work.

♦ Highland Park, Mich. The school board has established a class in sight saving in the high school to follow up work done with students with defective vision.

♦ Sturgis, Mich. A sight-saving class has been started, with a special instructor in charge. The school system will be reimbursed for a large part of the money spent.

♦ Harlan, Ky. Classes in salesmanship for store employees have been established, under the direction of Supt. L. C. Henderson.

♦ Detroit, Mich. A camera club has been organized in the Cass Evening School. A course in consumer buying is being offered in the Northern Evening School.

♦ The New York City board of education, in an analysis of figures recently released, shows that in the past decade, 2,464 elementary classes have been eliminated from the city school system. Since the peak year of 1928 the elementary division has lost 150,580 children. The report shows that the population loss has been growing during the past five years, reaching a record loss of 27,554 in 1939. A similar drop, on a much smaller scale, has been going on in the high schools.

The school officials estimate that the discontinuance of the 2,464 classes will result in a saving to the school system, in salaries alone, of more than \$5,000,000.

♦ Charles F. Dienst, Deputy State Superintendent of Instruction of Nebraska, has issued a statement, showing that the school population of Nebraska has been steadily falling in recent years because of a lack of replacement children. Figures compiled by the state education department show that the number of students in the grades has been going steadily down, dropping from 256,284 in 1929-30, to 198,344 for the 1938-39 term. In the high school, it is shown, the enrollment has gained. The situation has been attributed to a general decline in the birth rate and population trends.

♦ Morrison, Ill. The school board is offering an adult-education course in the evening school this year. Among the subjects offered are agriculture, home economics, blueprint reading, and typewriting.

♦ Dunkirk, Ind. The school board has purchased and installed an audiophone, a telebinocular, and a sound motion-picture projector for classroom use. The equipment will provide means for checking hearing and sight and will offer work in visual education.

♦ Sandusky, Ohio. The school board has voted to eliminate midyear promotions in the schools. The plan will directly affect 500 pupils.

♦ Lawrence, Kans. The school board has approved a new plan of supervised play for pupils of the elementary grades. Senior students in physical education in the state university will be assigned to classes in the various schools.

♦ Augusta, Ga. A new course in waitress training is being offered in the vocational department of the schools. The course consists of twelve one-hour classes which meet twice each week.

♦ Mankato, Minn. The school board has purchased one sound projector and one additional silent projector for showing educational films in classrooms. The cost was estimated at \$650.

♦ Quincy, Ill. A curriculum development program has been in operation in the public schools during the past year and one half. The program was carried on by Supt. Robert O. Evans, during the school year 1938-39, on a city-wide teacher committee basis. During the year 1939-40 the work has been carried on under the full-time direction of Mr. B. L. Smith, director of curriculum, research, and public relations.

♦ An advisory committee of 200, appointed recently by Governor Bailey of Arkansas, has begun its work of evolving a practical school program for the state. The first action of the group was the adoption of a resolution favoring twelve grades of free school for all children toward which to strive. The discussion then proceeded to the five points of organization, finance, administration, instruction, and school plant and equipment.

♦ Knoxville, Tenn. A course in aeronautics is being offered in the Star Technical High School. The work is limited to ground aviation courses.

♦ Knoxville, Tenn. A complete curriculum-revision program has been inaugurated in every department of the junior and senior high schools. One of the first courses completed is one dealing

(Concluded on page 90)



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(Concluded from page 88)

with auditorium activities in the platoon schools, junior high schools, and senior high schools. At least three kinds of auditorium plans are offered in the junior high schools, and two in the elementary schools.

♦ In cooperation with a local junior league, a museum has been established in one of the school buildings in Knoxville, Tenn. This museum is open twice each week, from 2:30 to 4:00 o'clock, for principals and for parent-teacher association members who bring children to see the exhibits. For the present, the museum is specializing in artwork and soap sculpture.

♦ The public schools of Knoxville, Tenn., have been for six years shifting from admission of beginners into the first grade twice a year, to a basis of annual admission. Instead of making an immediate change, the transition has been from one successive grade to another each year, to prevent any students from suffering from either unwise double promotion or demotion in order to speed up the change. This year, for the first time, there will be no new groups entering the junior high school, but each of these schools will promote students into the senior high school, leaving surplus teachers. Such teachers are being used for an intensive program of remedial teaching in the junior high schools in the spring semester.

♦ Frank R. Wassung, superintendent of schools at Garden City, L. I., N. Y., speaking recently before the Rockville Centre Luncheon Club, criticized the football setup in schools and advocated free admission to reduce emphasis on the sport. He pointed out that one of the greatest evils is the constant cry for more gate receipts. This general practice has a tendency to exploit the boys for financial returns instead of providing the money through school budgets. Plans are being made to reorganize the athletic program and to give athletic directors and coaches the same status as other instructors.

♦ Warren, R. I. The school board has voted to eliminate graduation exercises for the grammar

schools. While no exercises will be held in June, the members of the eighth-grade class will be given cards signifying that they are eligible to admission to the senior high school. The board has adopted a small-type graduation diploma which can be contained in a leather folder.

♦ Ann Arbor, Mich. The school board has been asked to approve a plan for a children's museum, to be housed in the abandoned Donovan School. It is planned to provide financial support for the museum through various contributory memberships.

♦ Casper, Wyo. The school board has installed a new stage-lighting system in the high-school auditorium. The cost of the system was \$1,100.

♦ The Pulaski County Special School District of Arkansas has adopted a resolution, which binds district officials not to buy or contract for supplies, except from firms or persons who have paid current taxes in full.

♦ Oklahoma City, Okla. The school board has adopted a new rule, barring all members of high-school fraternities, sororities, and other secret clubs from participation in school activities and graduation exercises. The board's action is aimed at the elimination of these organizations in the high schools.

♦ Kansas City, Mo. The school board has adopted a rule that no home study be required of children below the sixth grade, except after consultations of parents and teachers.

♦ South Hadley Falls, Mass. The school board is cooperating with the WPA in plans for a nutrition project in the schools. Approximately 150 needy pupils will be eligible for meals to be prepared by WPA workers.

♦ The National Youth Administration has reported that it has placed 13,038 young men and women in private jobs during the month of December, 1939, through its junior placement services operated in connection with state employment offices.

♦ Supt. H. T. Lowe, Newport, R. I., has presented his annual report to the school board, with recommendations calling for the improvement of

the schools. Among the changes are the appointment of a director of instruction, a visiting teacher, a staff study of courses to make possible further exploratory courses in high school, and a reorganization of the high-school office.

♦ East Providence, R. I. The school board has voted to establish a speech corrective department in the schools.

♦ Fall River, Mass. The school board proposed the establishment of a religious education program to combat communism.

♦ The Sandwich Township high school, in Sandwich, Ill., is conducting an adult-education evening school for a ten weeks' term. Among the courses being offered are agriculture, home economics, general-shop work, home crafts, home nursing, and dental hygiene.

♦ Peru, Ill. The school board has approved a modified departmental plan for grades five and six. Under the plan, the major subjects will be taught by one teacher. A special homeroom session will be held once a week.

♦ Frankfort, Ky. The Good Fellowship Committee of the city schools has reported satisfactory progress with a six-point program of achievement in connection with the care of public property. Among the betterments undertaken were special care of grounds and shrubbery, organization of yard patrols, posters urging cleanliness around the school, and the problem of window breakage. Through the activities of the committee, it is believed the window problem has been solved.

♦ Bristol, Conn. The school board has established a technical high school in a converted factory building, which provides space for the housing of 190 boys at present, and will be increased by 70 more next September. At present the school is offering instruction in such subjects as automotive mechanics, woodworking, machine work, tin-smithing, and electrical work. The local industrial plants have approved the work and are cooperating by giving machinery and by allowing their workers and foremen to assist in carrying on intershop visits and arranging courses.



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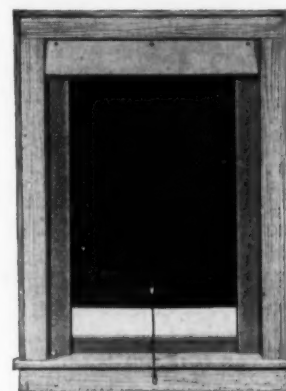
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## New Rules and Regulations

### RULES FOR SAFE BUS DRIVING

The education division of the United States Office of Indian Affairs has recently adopted a series of regulations for the school vehicles provided in connection with the several Indian schools. The rules which were promulgated by Willard W. Beatty, Director of Education, include 34 distinct regulations as follows:

1. School buses and their drivers shall conform to the laws, regulations, and requirements of the states wherein the buses are operated, in all states having applicable regulations.
2. In states where state licenses are issued, only licensed drivers shall operate government automotive equipment. On all reservations an Indian Service drivers' license issued upon examination and by authority of the superintendent also will be required. Official drivers' badges will be issued by the Washington Office to licensed drivers. No Indian Service bus carrying pupils may be operated by a minor student.
3. Before placing a bus in charge of a substitute, permission must be secured from the principal or school superintendent. The substitute driver shall comply with all these regulations.
4. The bus driver has much greater responsibility than simply the physical task of guiding his vehicle. Responsibility is placed on him for the personal behavior of the students in his bus while in transit, and it is therefore essential that this fact be borne in mind in the selection and retention of employees for this position.
5. No one shall ride in the driver's seat except the driver.
6. Drivers must not allow pupils to thrust their heads or arms out of open windows.
7. Except in an emergency, passengers shall not talk to the bus driver.
8. Passengers shall not stand where they interfere with the vision of the driver.

9. Passengers shall not ride outside the bus.
10. All buses shall carry fire extinguishers.
11. All buses shall be equipped with first-aid kit and the driver instructed in first aid.
12. Buses shall be inspected for all safety equipment, including brakes and lights (this is now required in 19 states), tires and mirrors. The inspection shall be at least once each week and with old buses daily. Motor-vehicle inspection report on a form provided for the purpose shall be filed in the local office. All motor vehicles shall be inspected and placed in first-class condition at least monthly.
13. Buses must be given mechanical examination at every 1,000 miles. They must carry on the windshield a notice stating the date of last examination and the condition of the bus at that time.
14. Buses shall be cleaned thoroughly each day when in use and disinfected at least once a week.
15. Buses shall not be used for transportation of heavy material which may result in damage to the bus. The upholstery shall be renewed as necessary and minor repairs shall be made promptly to prolong the life of the bus as a presentable and comfortable means for transporting children. Broken windows must be repaired immediately and before the bus starts another trip.
16. When pupils are being transported, the bus shall not haul a trailer or other vehicle.
17. All doors to the bus must be kept closed while the bus is in motion, and opened only by the driver after the bus has come to a complete stop, and the driver has assured himself that traffic is responding to control.
18. The bus shall never carry a load exceeding that which is prescribed by the manufacturer.
19. If any old buses are in use which do not conform to the best modern safety requirements, schools must take whatever steps are possible to safeguard the children until such time as these buses can be replaced.
20. Gas tanks shall not be filled while pupils are in the bus.
21. The greatest care shall be taken when a

- bus enters the school grounds to receive or discharge passengers. At the close of school, buses should be in position prior to pupils' dismissal and may not be placed in motion until all children are in the buses and the grounds clear of children. No buses may back up on the school grounds.
  22. School buses must come to a full stop at all railroad crossings and dangerous intersections and only proceed when the right of way is clear.
  23. Buses must be operated at a safe speed at all times. The speed shall be such that the bus shall be always under the control of the driver, and may be brought to a full stop whenever required by traffic or any other contingencies. Buses shall not be stopped near the crest of a hill or on a curve nor pass other vehicles at dangerous places.
  24. Drivers must make a full stop and give warning before making a left-hand turn.
  25. Drivers must not leave motor vehicles without first stopping the motor and setting the emergency brakes or leaving bus in gear.
  26. When one bus is following another they shall keep at least 300 feet apart.
  27. Buses shall pick up or discharge passengers at extreme right of road, off traveled highways, or at designated stops or shelters for that purpose. The driver shall display a red flag or a stop signal at his left before opening the bus door to discharge passengers, and until the bus resumes motion.
  28. Drivers shall signal to vehicles coming up from the rear before stopping or turning.
  29. Automotive equipment approaching school buses halted to discharge passengers shall come to a complete stop and shall proceed with caution only when it is evident that children are off the road.
  30. In heavily traveled areas, two or three older students traveling on the school bus may be constituted a traffic patrol, equipped with stop flags and trained to control traffic and assist younger children in crossing the highways while the bus is halted.
- The organization of school and bus patrols is recommended wherever conditions warrant.

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31. Where it is necessary for pupils to cross a highway in order to board a bus or after leaving a bus, pupils shall await signal from the driver or traffic patrol before crossing the highway. It shall be the responsibility of the driver to ascertain that the highway is clear before signaling the pupils to cross.

32. All buses shall be provided with an auxiliary exit to be used only in case of emergency, which shall be tested at frequent intervals to determine that it operates easily. Nothing shall be placed where it will obstruct free use of the emergency door.

33. During the winter season no school bus shall be taken out within chains, shovel, blankets, adequate gasoline, a heater and cocoa mats to furnish traction when necessary under the rear wheels, and any other equipment which may be a safeguard if stalled in bad weather.

34. School buses shall be used only for the transportation of school children or patients attending clinics organized by the health division, unless special permission for other use shall have been obtained from the Indian Office.

In connection with the rules, Dr. Beatty has ordered that each Indian Service school served by school buses shall provide regular instruction at repeated intervals on safety precautions to be observed in entering and leaving school buses, and in walking along or across highways. Dr. Beatty insists that the bus drivers shall contribute to this instruction and shall remind children of the precautions to be observed. Principals and teachers are required to instruct the bus drivers in their duties and to supplement the safety instruction of pupils.

In case of accident, complete written reports must be made, describing the accident, the injuries to persons, the damage done, causes of the accident. Names of persons involved, and witnesses must be presented. If possible, sketches and photographs are to be provided.

## WILL REOPEN KINDERGARTENS

Kindergartens, which were discontinued in 1931 for financial reasons, will be re-established in

September, 1940, at Rock Island, Ill. Shrinkage in elementary-school enrollments and a more efficient handling of teachers through elimination of midyear promotions, has made the change possible. Through good fiscal management the school board has eliminated all fund indebtedness and established a substantial surplus. Since there was no need for further excessive economies it was decided to enlarge the school program.

New report cards for the elementary schools have been put in operation. The cards were prepared by committees of teachers and principals, and establish new grades of satisfactory, not entirely satisfactory, and unsatisfactory. The cards have proved successful and have been received cordially by the parents and children.

## GUIDANCE IN PROVIDENCE, RHODE ISLAND

Guidance is one of the essential policies of the junior and senior high schools of the city of Providence, R. I. In discussing the guidance work carried on during the school year 1938 and 1939, Dr. James L. Hanley, Superintendent of Schools, reports as follows to the school committee:

"Every youth needs understanding and help in making the many important decisions that confront him within and without the school walls. He needs a friend who knows enough about him and about the vast and complicated world of educational and vocational opportunities to help him intelligently. He needs advice on engrossing personal problems which are frequently accentuated by the inability to find work. It is not enough for him to learn about the occupational world accidentally and unaided. The school, too, needs to know him intimately if it is to serve him best. A knowledge of his ability, attitude toward school, ambitions, home conditions, health, and emotional stability is significant and vital to the school's best service. He needs to be helped in his search for a job. After going to work, the school can and should help in the problems of adjustment and additional training.

"In a word, youth needs guidance. In this essential phase of education, Providence has performed

a pioneer service. Every student in our junior and senior high schools is in the hands of a trained counselor, who meets him, in groups and individually, continuously through his three years in the school, and whose job it is to understand him and to assist in making the decisions and choices upon which his future depends, or by which it will be in some measure determined.

"There are many attending high school with the idea of leaving immediately upon their finding the first job that presents itself. Their days in school are numbered and precious. They need intensive training in citizenship, in literature, and in basic skills. They, too, have problems that call for sympathetic intelligent guidance. They are assigned to special pre-employment counselors, whose responsibility it is to understand and to help them in the light of their immediate and individual requirements. These counselors are also their teachers in English and social studies."

## ANNOUNCE ACCOUNTING MANUAL

The Financial Advisory Service of the American Council on Education, Washington, has announced a new book entitled, *A Manual of Teachers College Accounting*, by Edward V. Miles. It is a companion volume to *Financial Reports for Colleges and Universities*, and was prepared in response to a demand for a system of uniform accounting in teachers' colleges. It begins by analyzing the accounting system and establishing a chart of accounts. Then it discusses budgetary control in its relation to the accounting system, and offers a complete plan for co-ordinating the budget, the accounting system, and financial statements. The book will be invaluable as a reference work for all college business officers.

• DR. H. E. CHRISTENBERRY, widely known for his activities in state and national school-board associations, has been re-elected unanimously president of the Knoxville, Tenn., school board. Dr. Christenberry has served the Knoxville board for fourteen years, during which time he has been president for nine years. He had previously served as president of the school board in a suburb, which has been absorbed in the extension of the Knoxville city limits.



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### New Books

#### Consumer Economic Problems

By H. G. Shields and W. Harmon Wilson. Cloth, x + 767 pages. Price, \$1.68. Southwestern Publishing Company, Cincinnati, Ohio.

This work outlines a rather complete course in applied economics for students at the high-school level. No attempt is made to develop the basic principles and assumptions of economic and social theory, and this lack is perhaps the one shortcoming of the book. The first five units, embracing eleven chapters, are primarily economic in content; the last nine units, including chapters twelve to thirty-two, are devoted almost solely to consumer problems—buying insurance, marketing and the consumer, credit and legal relations of the buyer, consumer protection, the practical technique of buying consumer goods, the buying of a home, and cooperative marketing and buying. The authors have balanced the subject, so far as this can be done, with the consumer idea as a major objective.

#### Participation of School Personnel in Administration

By Oliver H. Bimson. Paper, 117 pages. Published by the author, at Lincoln, Nebr.

This doctoral thesis reveals upon examination a compact, yet comprehensive, study on American school administration. The real purpose of the book is to suggest means for effective participation of the school personnel in school-administrative affairs.

In arriving at this purpose, the author provides a historical sketch of the development of school administration and defines the relation of the superintendent to other members of the school organization. From the earlier period when lay management and supervision of the schools obtained, he reaches the present time when the superintendent is the chief executive of the school system. The author brings to the service of his study, a select list of quotations from the writ-

ings of the most outstanding educators. In fact, the text is rich in authoritative expression.

The pivotal chapter is the one which concerns itself with the desirability of the participation of the school personnel in school administration. In his summary the author holds that "it is desirable for school employees to participate in administration, is pretty commonly agreed by those in education who have expressed themselves on the matter. Differences of opinion come in connection with the theory and practice of participation. One group of people feel that the teacher's main job is in the classroom and that when he or she is called upon to take part in work outside of this field, there is danger of having poorer teaching as a result. Participation on the part of teachers would consist in doing well the work of the classroom. Another group insist that the teacher has a right to participate in all forms of administrative procedure that affect the teacher, even outside of the range of the teacher's immediate interest. Between the two extremes will be found a group of people who feel that there are times and situations when the teachers and other employees can render most effective service by helping to formulate administrative policy, and there are other times when it would be merely a waste of time and effort to bring the employee into the administrative planning."

The author concludes with five recommendations which he holds may be generally applied for the betterment of school administration. These may be stated as follows:

"1. All employees should have the opportunity to engage in a cooperative study of administrative problems." In spite of the natural limitations for such study, the chief school administrative officer of a school system should carry on a carefully planned process of education, and should encourage participation in a desirable method of formulating educational policies.

"2. Participation in administration is desirable and possible in all school systems, regardless of size." While differences in size modify the plan

of organization and of government, the general attitude of all people will favorably affect the consideration of problems.

"3. The plan of organization should be adapted to the needs of each school system." It is important that the spirit of cooperative administration be not lost through complicated and awkward procedures.

"4. Participation should be employed only in connection with problems of major importance."

"5. Participation can be brought about by a common desire for cooperative action on the part of all persons involved." This is possible where there is mutual confidence and strong interest in the welfare of the school.

#### Brief-Form Drills

By Edith V. Bisbee. Paper, 113 pages. Price, 48 cents. The Gregg Publishing Company, New York, N. Y.

For easy, permanent learning, these drills give an opportunity for using the brief forms in connected matter and for thus using them with frequent repetition.

#### Primary Arithmetic Through Experience

By John R. Clark and Arthur S. Otis. Cloth, 213 pages. Price, \$1.40. World Book Co., Yonkers, N. Y.

A number of new ideas have been widely accepted and put into successful practice in the teaching of primary arithmetic within the past few years. In this book, the authors have described in detail the methods used by superior teachers. Procedures have been worked out in detail for utilizing firsthand problems effectively; for setting up learning situations in which problems arise. The great contribution of the book is the procedure for directing, organizing, and extending the incidental learnings so that pupils will arrive at certain fundamental understandings—fundamental arithmetic meanings that are of continuing use.

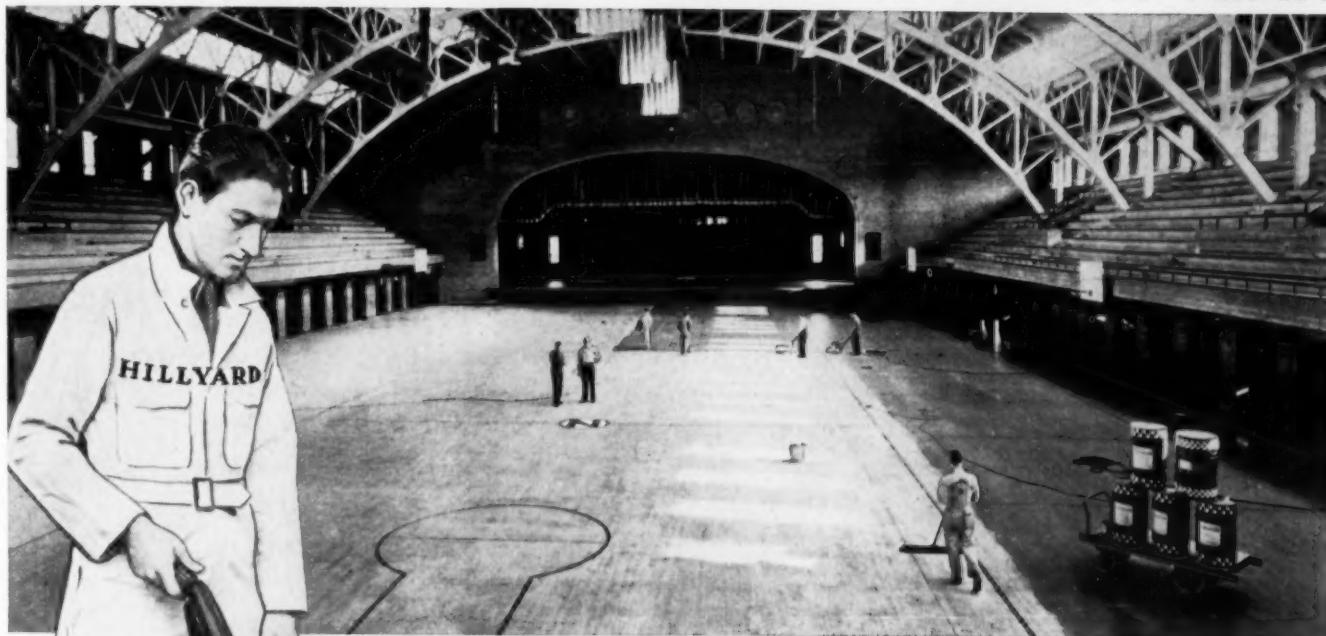
#### Story Pictures of Clothing and Shelter

By Jonathan Yale. Cloth, 277 pages. Price, 92 cents. Beckley-Cardy Company, Chicago, Ill.

(Concluded on page 98)



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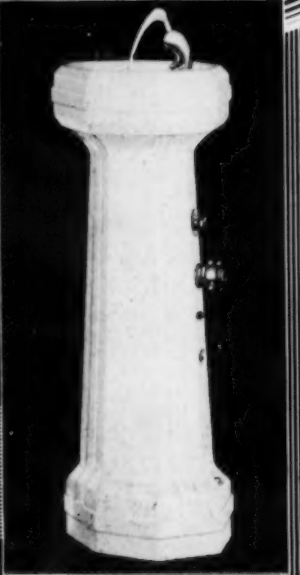
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(Concluded from page 96)

This book tells the story of the development and present use of clothing and shelter and of certain materials employed in their production and manufacture. The introductory chapters which romance considerably concerning primitive man and his shelter, provide an extremely unattractive introduction to the subject.

#### School Friends

By Louis G. Nemec. Cloth, 80 pages. The Macmillan Company, New York, N. Y.

This supplementary reader for first-grade use, introduces children to the idea of cooperation and helpfulness to others in play and in school-work. The illustrations are attractive and the vocabulary is within the standardized limits of first-grade reading.

#### The Library in the School

By Lucile F. Fargo. Cloth, 527 pages. Price, \$3.50. American Library Association, Chicago, Ill.

The third revision of a book which has become a teacher's classic.

#### The Strathmore Plan for Teaching Arithmetic

By Margaret Scherer. Teacher's Manual, Class Record, and Practice Slate. Published by the Strathmore Company, Aurora, Ill.

#### The Strathmore Plan for Teaching English

By Charles B. Price and Lena D. Price. Teacher's Manual, Class Record, and Practice Slate. The Strathmore Company, publishers, Aurora, Ill.

The Strathmore Plan for teaching arithmetic and English involves essentially the complete use of the well-established plan of "pretesting, teaching, practicing, retesting, and reteaching" in the average school. The usual plan frequently fails because there is a lack of adequate materials and insufficient motivation for the exercises. Under the Strathmore Plan, the handicaps have been overcome by two teachers and a principal, who have worked under the immediate direction of Dr. Frank N. Freeman, the well-known psychologist and dean of the School of Education at the University of California.

The plan provides nonconsumable tests and exercises in arithmetic for grades two to eight inclusive, and in English for grades two to six inclusive. The tests are genuinely nonconsumable. The material is presented with the aid of a practice slate, which is a very practical adaption to the needs of schools of the old "magic slate," formerly considered a novelty and more or less of a toy. The tests and practice lessons are legibly printed on transparent sheets which the children insert in the slate. After the work is performed, the teacher checks it with the help of her key. The film of the slate is raised and the writing disappears.

The Teacher's Manuals are each accompanied by a set of materials containing the complete exercises, together with extensive aids for getting the most from each unit. Unquestionably, the material will be of especial interest in schools where teachers are expected to handle large numbers of pupils, and also where remedial work will be required.

#### New Work-Play Books

By Arthur I. Gates, Celeste C. Peardon, and other authors. Paper, 48 pages each. Price, 16 cents each. The Macmillan Company, New York, N. Y.

This series of ten primers in the new work-play readers series represents a wide variety of child interests.

The *Surprise Box* is devoted to interesting play and work activities in the home. *Tip and Animal Parade* exemplify the love of children for dogs and other domestic animals. *Sing, Canary, Sing, The Painted Calf, Polly the Kid, and Elsie, the Elephant*, introduce farm animals and other animal pets. *Mr. Joey and the Pig* is a circus and travel story. *In Came Pinky* tells the adventures of a cat. *Bruce and Barbara* relates the fun of a winter visit to the farm.

#### First Number Book

By John R. Clark, A. S. Otis, and Caroline Hatton. Paper, 64 pages. Price, 24 cents. World Book Company, Yonkers, N. Y.

This is a first book for children who are starting both reading and number work. It provides an unusually attractive variety of illustrations and text to be studied, to be colored, and to be handled. The emphasis throughout is upon child interests and a clear understanding of number concepts.

#### Down Our Street

By A. I. Gates, Miriam B. Huber, Celeste C. Peardon. Cloth, 202 pages. The Macmillan Company, New York, N. Y.

This first reader is based on children's interest in and need for information on community and family life, nature "the year round," the occupations of adult life, and play interests. The book adds more than two hundred basic words to the vocabulary acquired in the pre-primer and primer of the "Work Play Books" of which it is a part.

#### Bookkeeping and Accounting

Vol. I. By James O. McKinsey and Edwin B. Piper. Cloth, 535 pages. Price, \$1.64. South-Western Publishing Company, Cincinnati, Ohio.

This is the fourth revised edition of a widely popular work. The changes involve new practices taken from the commercial world. Some attention is given to personal accounting, so necessary in these days of social security and income taxes. Three new chapters, embracing introductory treatment of controlling accounts, partnerships and corporations, have been added.

#### Safety: Home, Field, Street

By Williamson, R. M., and Blackhurst, J. H. University Press, Des Moines, Iowa, publishers.

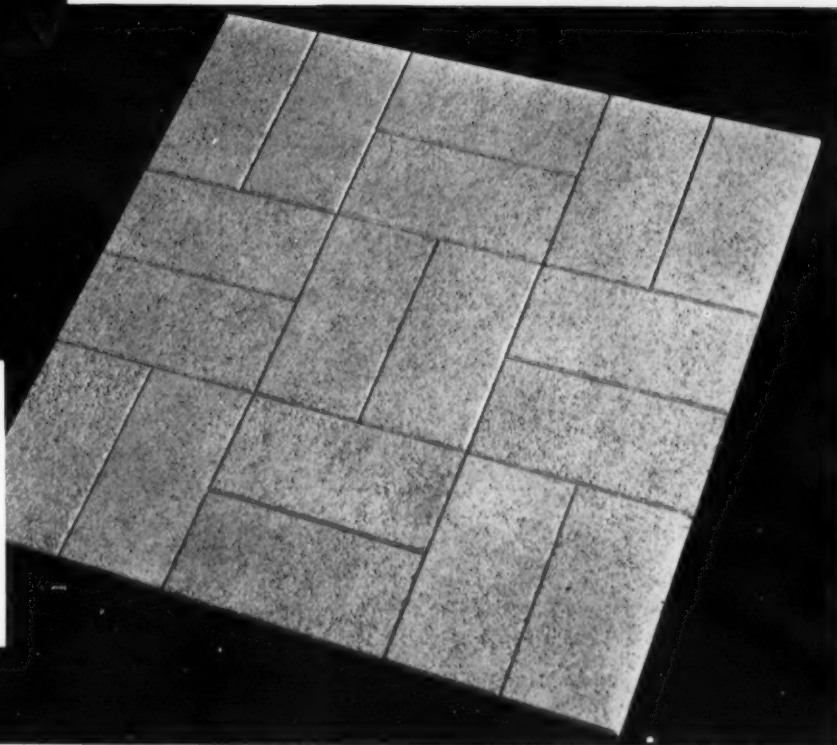
This set of 26 pairs of large pictures will add to the effectiveness of the teaching of safety in schools. Each incident portrayed on the 9 by 12-inch posters shows the safe as well as the dangerous way of acting in the situation. On the back of each card are listed the means of preventing accidents as well as advice for first aid to be administered in case an accident does happen.



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## School Board News

♦ Oklahoma City, Okla. The school board has intimated that it will insist on a full nine-month school term, even though it may call for a general readjustment of teachers' salaries. The board feels that it has a duty to the children to maintain its regular school term, in spite of a shortage of funds.

♦ Providence, R. I. The school board has called upon the town of North Providence to pay its overdue tuition bill or suffer the dismissal of students attending the city high schools. A new high school was opened in North Providence this year, but some of the students who had attended the city high schools in past years, decided to continue and receive their diplomas there. Next year no students will leave town to attend school.

♦ Greenwich, Conn. Supt. M. W. Linn, in his annual report to the school board, has called the year 1938-39 a year of real progress and points to the need of plans for continued development of the school system.

For the most part, he says, attention has been given to work already under way. As in the past, the major emphasis has been placed on the instructional program which, after all, is the heart of the school. This emphasis has been confined largely to curriculum building and teacher-in-service training.

♦ Madison, Wis. The school board has voted to accept gifts of flags and scholarships to the schools. The board has considered possible use of the Doty School for an administration building.

♦ Beginning with the Twin Oaks School in Brighton Township, Wis., a series of seven meetings will be held by small groups of county school-board members to promote greater cooperation with the schools and to understand their problems.

The meetings which were called by County Supt. C. L. Eggert, will discuss the topics of

legislation, reaction of boards to story projects, handicraft, harmonica bands, and similar activities.

♦ Plans have been made for a series of hearing tests in the schools of Chatham County, Ga. The tests will be conducted under the direction of T. W. Anderson, state supervisor of the school hearing-test survey, sponsored by the College of Education of the University of Georgia.

♦ Austin, Minn. The school board has proposed that the public school be used for a constructive recreational program and to that end has offered its cooperation. The board granted the request of the city planning board for the use of five schools as recreation centers.

♦ Salina, Calif. The school board has proposed the reconstruction of the high-school building to overcome structural hazards uncovered by the state engineer in 1933. Under a new state law, the voters will decide in an election what steps will be taken to remove the deficiencies.

♦ Lincoln, Nebr. The school board has installed a sound system in the Lincoln High School. The total cost of the system is \$3,055, of which \$2,055 has been provided by the school activities fund.

♦ Battle Creek, Mich. With the opening of the second semester, the schools have entered upon another step in the new full-year promotion system. This system, adopted last June, was inaugurated in September as an economy measure. Under the plan, students in the first six grades were reclassified, and half grades were eliminated in the first five grades. In September, 1940, half grades will be eliminated in the sixth grade, and in 1941 in the seventh grade. Students in the 6-2 grade were promoted to the junior high school at the beginning of the second semester.

♦ Fremont, Ohio. The school board has voted to purchase dictaphone equipment for the administrative office, at a cost of \$450. The board has also purchased two motion-picture projectors.

♦ San Antonio, Tex. The school board has started work on the indexing of the records of the board covering a period of forty years. The

work which will be done by WPA workers, will require eleven months to complete, and will cost \$18,020 in federal funds and \$1,690 in school-board funds.

♦ Superior, Wis. The public schools will be closed from March 22 to April 1, and all classes will be discontinued for the school year on May 29, instead of June 6, under an order of the school board. The action of the board was taken as an economy measure in order to effect a saving of \$19,000 in salaries. The board is faced with the necessity of making further reductions in its present budget of \$592,000.

♦ Beverly, Mass. A series of special meetings of the school board will be held during the next few months for the purpose of conferring with the various heads of departments relative to their programs, needs, and accomplishments. The board has approved a plan of Supt. S. M. King, calling for a lecture program for adult-education classes in the evening school. Under the plan, the former grammar-school class will be discontinued, and the money used to defray the cost of a speaker.

♦ Stratford, Conn. Salary increases for 51 members of the school faculty have been granted by the board of education. The teachers included are those receiving less than \$1,200 a year.

♦ St. Louis, Mo. The board of education spent \$27,000 for textbooks and library books during the first seven months of the current school year, according to a report issued by the school officials. This is a large reduction, compared with the expenditure of \$152,000 for such material purchased during the last fiscal year. Acting Superintendent George L. Hawkins has indicated that the total purchases for this year would be markedly less than formerly, due to the work of the auditors and the fact that new orders are being held up until the system of selecting and ordering books is revised. During the remainder of the school year, only books which have been completely worn out will be replaced.

A grand jury investigation of irregularities in the school system has begun following the completion of the audit of relief and luncheon funds.



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### *School Hygiene Notes*

#### RURAL-SCHOOL WATER SUPPLY AND SEWAGE DISPOSAL

School trustees and the teaching staff are primarily responsible for the sanitary conditions in and around rural schools. It is recognized that every effort should be made to encourage trustees in securing adequate advice because they usually do not solicit such advice. Local well drillers and carpenters are often employed to develop sources of water supply or to provide toilet facilities without any knowledge as to the problems involved.

Speaking on this subject before the District Superintendents of Schools of New York State, at their meeting held in New York City on October 12, Mr. C. R. Cox, chief of the Bureau of Water Supply, said:

"Many of the local school physicians who are primarily concerned with sanitation and public health in the schools under their jurisdiction are also the local health officer of the township or municipality in which the schools are located. This is fortunate for the reason that close relationships exist between the health officers and the district state health officers of the department. It is recognized that school trustees or teachers acting through the local physicians and health officers can secure directly the assistance and cooperation of the district health officers without direct appeal to the state health department.

"In addition to this assistance, the Division of Buildings and Grounds of the State Education Department has developed a co-

operative program with the central office of the State Health Department, through which plans for proposed water-supply and sewage-disposal systems may be approved by the State Department of Health before the plans are presented to the Division of Buildings and Grounds. This is in harmony with the requirements of the public health law. Architects and sanitary engineers have been encouraged to present suitable plans and specifications for approval. In general it is urged that only those plans be submitted to the State Health Department for approval which have to do with water-supply and sewage-disposal projects for schools."

The need for improving sanitary conditions in rural schools, according to Mr. Cox, has been emphasized as a result of surveys conducted in three typical counties of the state. At that time it was noted that 54 of the 97 schools in these counties were being operated with defective water supply facilities and over 50 per cent had defective toilet facilities. To date only 19 of these schools are still served by unsatisfactory water supplies.

In the light of the studies made, it is recognized that the demand for running-water systems for rural schools must be anticipated and that their advantages and disadvantages must be studied in the light of specific local conditions at each particular school. Competent architects and sanitary engineers must be employed to design running-water-supply systems for rural schools. Where it is anticipated that wells with hand pumps, small springs, and toilet facilities will be developed, there is need for the distribution of suggestive literature to local school officials who are without technical guidance, inform-

ing them of the services of the district staff of the State Health Department. The services of the district sanitary engineer are helpful in connection with small projects which present a serious problem to local school trustees, and where plans have not been prepared for formal approval by the state departments of education and health.

Adequate toilet facilities for rural schools present a complex problem where several factors create antagonistic influences. The demand for running water and flush toilets may be located at any suitable point in a school building and presents the problem of disposal of large volumes of sewage. This can be accomplished through the use of septic tanks. Hand watertight chemical toilets, it has been found, are difficult to maintain in a sanitary condition. Chemical toilets are losing their popularity but they are still the most satisfactory type of sanitary system for use where watertight structures are needed to protect near-by wells. The same is true of the "septic" toilet which provides for the discharge of surplus liquid wastes and which can be operated without serious difficulties.

The basic problem, in the opinion of Mr. Cox, is to determine whether available funds for running-water systems are provided, and if so, whether local conditions favor the securing of an ample supply of water of safe and sanitary quality. If funds are lacking, or conditions do not favor sewage disposal, then springs or wells with hand pumps and sanitary privies must be used. The site of the school should be considered from the standpoint of water supply and toilet facilities before the site is finally selected in order that difficulties may be avoided.

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### HYGIENE AND SANITATION

♦ Knoxville, Tenn. Considerable success has been reported in a program for combating cold epidemics in the schools. In the early fall, a committee is appointed consisting of a school physician, the head of the attendance department, the directors of the secondary and elementary education, and the supervisor of health. This committee prepares a program of general control measures, which emphasizes the regular morning inspections of children, and the reporting of every child showing symptoms of colds. Increased provisions for handwashing facilities have been made in some of the schools.

♦ The school board of Minneapolis, Minn., has appointed Dr. Arthur E. Karlstrom as director of hygiene and health education.

♦ Savannah, Ga. The school board has received a request from Dr. C. C. Hedges, city health officer, asking permission to conduct tuberculin tests in the high school. The tests under the plan, would be voluntarily assented to by parents of the students.

♦ Barrington, Ill. A free lunch program, on an experimental basis, is being conducted in the schools. Meals are prepared for indigent children by the home-economics department, with the assistance of a volunteer worker from the parent-teacher association.

♦ Wichita Falls, Tex. The school board has adopted a rule requiring vaccination for smallpox. Ten students have been barred from school attendance who lack vaccination.

♦ Highland Park, Mich. A total of 375 needy children are being fed daily in the schools, under a WPA hot-lunch program. The food is prepared from surplus commodities and is served by workers provided by the WPA.

♦ Hartford City, Ind. The Delta Theta Tau Society has made plans for the free distribution of Haliver Oil capsules to grade-school students. More than sixty students have benefited from the project.

♦ Tulsa, Okla. The school board has approved the establishment of free hot-lunch programs for indigent pupils. The programs are being operated with the aid of the WPA, Federal Surplus Commodities Corporation, and welfare agencies.

♦ Dr. Charles F. Good has been appointed directing supervisor of medical inspection for the public schools of Cleveland, Ohio. Dr. Good has been a member of the staff of the school medical department for five years.

♦ Sioux City, Iowa. Physical examinations of the teaching staff have been conducted with the approval of the board of education. The examinations were made by a committee of 40 members of the Woodbury County medical society.

### SCHOOL ADMINISTRATION

♦ School census figures collected in Montana have revealed that the number of school children under 6 years of age today in the state totals 50,503, as compared with 69,240 in 1919.

This amazing decrease is partly due to a decreasing population but in large part is due to the decline in the state's birth rate. Despite the decline in the number of grade schools, the revenue for public schools has increased from \$11,000,000 in 1934 to \$13,500,000 in 1939. Plant and transportation costs have increased from 23 per cent in 1935 to 30 per cent in 1939.

### CENTRAL CONTROL OF SCHOOL AUTHORITIES

(Concluded from page 60)

stances should extend control in accord therewith. Only in this manner can local responsibility and initiative be developed.

At the present time in some of our states small local and inefficient authorities or units are given more control than they can effectively handle while more able authori-

ties are frequently much too restricted. The result is intolerable inefficiency and waste in some areas and unnecessary checks upon local authority in others. There must be a recognition of the view which every able teacher develops; namely, that controls must be extended to each individual or unit in accord with his or its ability to effectively exercise such control.

With the development of this view there is genuine hope that public school administration in the United States will become much more efficient and at the same time will stimulate local initiative and responsibility far more than has been the situation to date. Fortunately with the development of this type of control it may be possible to have strong local responsibility even though many state and federal funds are received. This would make possible the employment of much more local initiative and intelligence than has been found — for at the present time many of our small communities are so poor that they can barely maintain a minimum program (defined at a very low level) rather than think of experimentation, and the development of a more outstanding educational service. If initiative, responsibility, and variation are desired, both the central and local authorities must be strengthened and administrative control must be much more generally employed while detailed statutory control is eliminated.



The booklets shown are titled "There's HIDDEN BEAUTY In FLOORS TOO..." and "The PROOF". The hand holds a sign that says "THESE FREE BOOKLETS".

**There's HIDDEN BEAUTY In FLOORS TOO...**  
Is the original beauty of your floors now masked by layers of grime? Do your floors defeat the very purpose of their installation—the way of the quickest and surest way of creating a favorable impression? If your floors are anything less than of radiant, new-like attractiveness, read how BRITEN-ALL can reveal their hidden beauty—and at minimum cost and maintenance.

**BRITEN-ALL**  
THE PROTECTIVE CLEANER  
CLEARS the PORES in FLOORS

**LIFT THE MASK**  
THAT IS HIDING THE BEAUTY OF YOUR FLOORS

**The PROOF**  
10,000,000 PAIRS OF FEET  
STEAMER  
VISTA-GLASS  
ACROSS  
FLOORING

**at the WORLD'S FAIR**  
You who have some problems of preserving and maintaining floors can find the probable answer in the performance of VESTAGLOSS at the World's Fair.

**6 Years of Wear in 6 Months**  
For six months VESTAGLOSS finish defied the daily grinding of millions of feet—thousands of square feet of floor space finished with VESTAGLOSS in its end. Your own floors may never be subjected to such intensive punishment—but VESTAGLOSS can take it.

## WILL SAVE YOUR MONEY AND YOUR FLOORS

How to bring out the hidden beauty in your floors . . . how to reduce maintenance and refinishing costs . . . how to reduce your floor budget and increase floor beauty. You'll find the answers to these and other important floor maintenance problems in these two authoritative booklets full of specific, scientific "how-to-do-it" information. Fill in coupon—or write for your copies today!

### FILL IN AND MAIL — TODAY!

Vestal Chemical Laboratories, Inc.,  
4963 Manchester Avenue,  
St. Louis, Missouri.

Gentlemen:

I am interested in reducing floor maintenance costs. Please send me your two free books on this subject.

School.....

City and State.....

By.....

Position.....

### VESTAL ELECTRIC FLOOR MACHINE Scrubs and Polishes All Kinds of Floors FASTER

Gives sparkling, sanitary cleanliness impossible to obtain by laborious hand work. No experience necessary—your own attendants can operate it perfectly the first time. Sturdy, perfectly balanced construction assures amazing quietness and ease of operation.



Write for  
**FREE**  
**Demonstration**  
In Your Own Building

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Guaranteed for One  
Year

Completely equipped  
with all necessary  
brushes and buffers.

Made and Guaranteed by the  
makers of famous SEPTISOL  
Soap and Dispensers.

**VESTAL CHEMICAL LABORATORIES, Inc.**  
ST. LOUIS NEW YORK

## CHILDREN'S FINGERS CAN'T HARM THESE WALLS



### *How Linowall makes wall cleaning easy in this children's dining-room*

**S**CHOOLROOMS always present a special cleaning problem. And no small part of this task is wall cleaning. For this reason, many schools are covering their walls with Linowall.

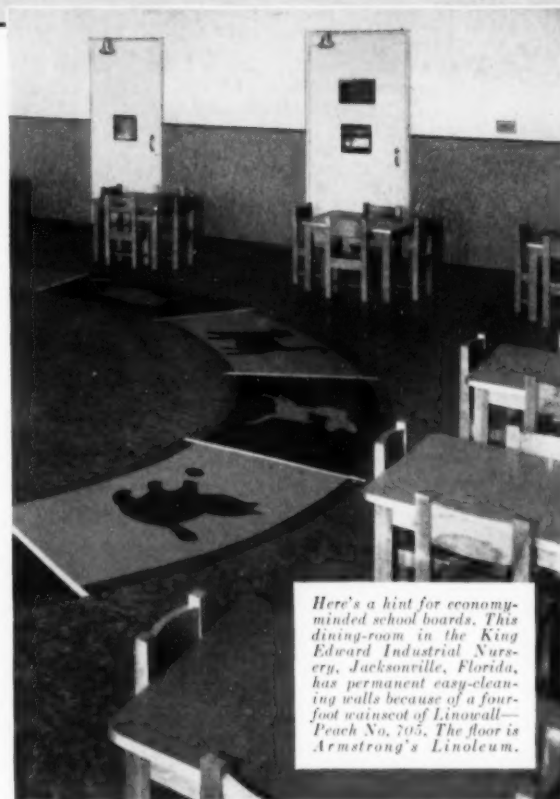
This linoleum-like wall treatment is ideal for walls throughout a school because it is so easy to keep clean. Washing with mild soapsuds will remove finger smudges, food, and ordinary stains. Among the other advantages that Linowall possesses is its resilience. This characteristic makes it a wear-resistant wall covering that won't chip, craze, or buckle, even under moderately settling walls.

#### *Send for Booklet*

There are thirty plain, marble, and tile color-effects available. The colors run right through to the back of the material, so they do not scuff off when bumped by youngsters' feet or furniture. Linowall—with all its extra features—costs about half as much as other permanent wall finishes. Get all the facts about this modern wall covering. Send for free, color-illustrated book—"Permanent Walls of Enduring Beauty." Armstrong Cork Co., 1221 State Street, Lancaster, Pa.



**ARMSTRONG'S** *Linowall*



Here's a hint for economy-minded school boards. This dining-room in the King Edward Industrial Nursery, Jacksonville, Florida, has permanent easy-cleaning walls because of a four-foot wainscot of Linowall—Peach No. 705. The floor is Armstrong's Linoleum.

## FIFTY YEARS OF MAP MAKING

(Concluded from page 61)

The new wall maps are adapted to the initial map study of the lower grades. They are simplified to the study level of the pupils in the grades for which they are intended. The legend is in bold type and serves as an index to the use of the map. Because these maps have made for a clearer understanding of the form and extent of the various continents and countries of the world, they have come to be more extensively used in the schools. This simplified political map and its companion, the physical-environment map, together with a good school globe quite regularly form the basis of beginning study of the subject of geography. Following this introductory work comes the type of wall map that opens new vistas for pupils. The number and character of these maps are mentioned elsewhere in this article.

These visual aids—the wall maps—have become so essential that the trained geography teacher has found that she must have them in order to do her work in effective fashion. This educational demand has resulted in a vast increase in the types and the uses of high-grade wall maps in our schools and higher educational institutions. The requirements for standard classification of schools by state educational departments also has been an important factor. Indeed, these state standards and the content of the newer textbooks have

constantly been considered for wall-map requirements by the leading map publishers.

In the field of history, the recent instructional needs have brought out a series of early European history and modern European history wall maps. Additional developments along this line have been several ancient history series, medieval and modern European series, or more comprehensively several world history series. For our own country there has been developed American history with European background series, and American citizenship and government series.

### **Physical, Regional, and Political Maps**

The trained teacher in the social sciences requires such wall-map material for class-work demonstration. Also, in correlation, she uses physical, regional, and political maps and globes to trace the path of historical development. There is a wealth of wall-map material available to meet the requirements of the intelligent, effective history teacher. And it has been such insistent demands that have made map publishers produce some of their most valuable maps.

Developments in the field of biology has brought about the need of accurate, scientific visual-aid charts to supplement the microscope and other apparatus of the laboratory. Anatomical, physiological, health and hygiene, botany, and zoology

charts have been published in answer to these needs. Some of the most superb color lithographic work in the entire map publishing field is to be found in this line of material.

Great strides forward have been accomplished in the publication and use of wall maps, but it is apparent that greater achievements are yet to come. The alert map publisher is keeping in intimate touch with educators and the teaching experts in the various departments of our educational institutions. Painsstaking attention is given to the newest development in textbook publications. Map production has reached the state where it is not just another series of maps to be produced, map publishers now are making a real contribution to educational progress. Their new releases of wall maps from the lithographic presses provide for correlation with the latest curriculum and textbook content.

### **SCHOOL-BUILDING CONSTRUCTION**

During the month of January, 1940, in 11 states west of the Rocky Mountains, contracts were let for 7 school buildings, costing \$491,400. Projects in preliminary stages were reported in the number of 10, to cost \$573,500.

♦ Covington, Ky. A program for the appraisal of teaching and the improvement of instruction has been prepared by a special committee appointed to undertake a study of teacher rating. A handbook entitled, *A Handbook for the Improvement of Instructors*, has been prepared for use in rating teachers. Another handbook has been prepared for the use of principals and supervisory officers.



## For Wood Floors in School Rooms, Auditoriums and Gymnasiums



### LIGNOPHOL

IS A ONE APPLICATION WOOD FINISH

For school floors to withstand constant hard usage.

### LIGNOPHOL

PRESERVES

LIGNOPHOL protects your floors and trim easily—economically—and for years.

### LIGNOPHOL

NON-SKID SURFACE FOR GYM FLOORS

This allows faster playing because it permits sudden stops and quick turns to be made without danger of skidding or falling.

### LIGNOPHOL

Brings out the natural beauty of the wood. Shades—natural, light, medium and dark brown. See reproduction of various woods in *Natural Colors in Sweet's Catalog, Page 1747*.

### NOTHING TO WEAR OFF

Shellac and varnish are easily scratched and wear off. LIGNOPHOL leaves nothing on the surface to be scratched or worn off.

It will protect your floors against warping, dry rot, cracking, splintering, pitting, scuffing and burn marks from rubber shoes. An excellent reason why you should investigate LIGNOPHOL for every wood floor or trim job on your list.

#### FOR YOUR CONCRETE FLOORS

#### USE LAPIDOLITH LIQUID

A chemical liquid that will dustproof and wearproof your floors. The result is permanent—no retreatment necessary.

The following educational institutions endorse LIGNOPHOL for wood floors:

Philadelphia Public Schools  
Philadelphia, Pa.

Ohio State University  
Columbus, Ohio

San Bernardino City Schools, San Bernardino, Calif.

Dept. J 3

**L. SONNEBORN SONS, INC.**

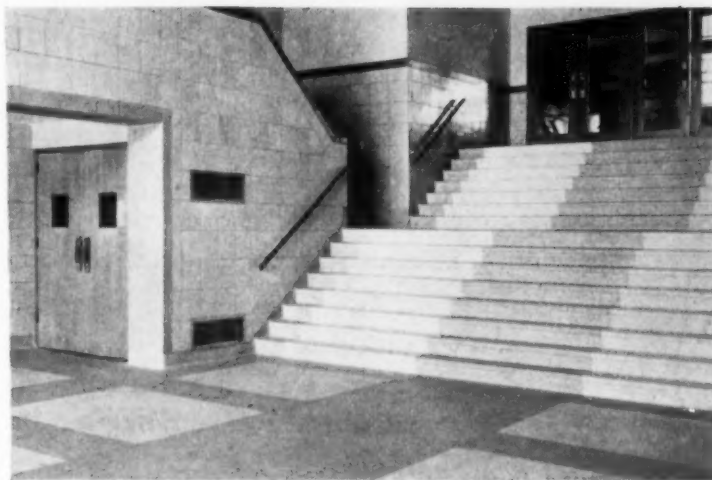
88 LEXINGTON AVE.

NEW YORK CITY

## GOOD LOOKS..LONG WEAR

You get them both with

# TERRAZZO\*



\* Terrazzo has been used in the entrance hall and stairway of the Little Flower Girls' Catholic High School, Philadelphia. Note how it blends with the surrounding architecture.

YOUNG, restless feet may scratch, scrape, and scuffle over this Terrazzo floor every school day of the year, for years and years to come. But they will not harm it. They will not mar its rich color and clean-cut design.

Besides extreme durability, architects and builders have discovered that Terrazzo has many other advantages\* that make it ideal for school entrances, corridors, classrooms, offices, laboratories. And so schools and universities all over the country are turning to Terrazzo. They're using it not only for floors, but also for wainscoting, stairways, and walls.

So specify Terrazzo! It can pay you well. For more details, see Sweet's Catalog, or write today to The National Terrazzo and Mosaic Association, 1420 New York Avenue, N. W., Washington, D. C.

#### \*FIVE REASONS WHY YOU WILL WANT TERRAZZO

**1. ECONOMY.** Initial cost with no repairs... no replacement... minimum upkeep over a period of years for Terrazzo is less than the cost of other types of floors plus repairs... replacements... higher upkeep costs. Terrazzo costs less per foot per year.

**2. COMFORT.** Finished Terrazzo is easy to walk on. It is less slippery than any waxed surface. Terrazzo can save you enough money to acousticate your ceiling, giving you a low noise level.

**3. CLEANLINESS.** Terrazzo can be sealed so as to be practically non-absorbent. Its smooth, jointless surface cleans easily. It

can harbor no accumulation of macroscopic or microscopic germs. It is aseptic.

**4. COLOR & DESIGN.** Terrazzo has warmth and beauty. You may specify any design you wish—pictorial or geometric—in virtually any combination of colors.

**5. DEPENDABLE INSTALLATION.** This Association's objective is to see that your Terrazzo installations turn out exactly as you want them. Write us today for complete information on the above points or see our advertisement in Sweet's Catalog for basic technical data.

**THE NATIONAL TERRAZZO AND  
MOSAIC ASSOCIATION**

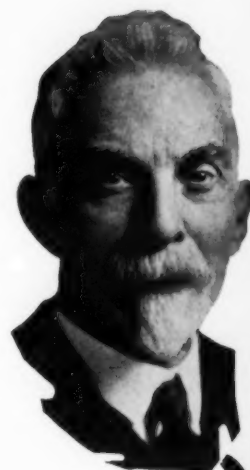


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President  
Lyon Metal Products,  
Incorporated

*Congratulates*

MR. WILLIAM GEORGE BRUCE



WILLIAM GEORGE BRUCE  
Publisher  
American School Board  
Journal

... on his half century of constructive contributions to the great progress in educational methods and school administration throughout the United States.

As one compares the school curriculum and facilities of 1890 with those of 1940, he must be impressed with the many milestones of progress which mark a fundamental and far-reaching advance achieved through men like Mr. Bruce.

## LYON METAL PRODUCTS, INCORPORATED

1503 RIVER STREET, AURORA, ILLINOIS

MANUFACTURERS OF:

SCHOOL LOCKERS, FOLDING CHAIRS, STORAGE CABINETS AND VOCATIONAL TRAINING SHOP EQUIPMENT

### SAFETY IN ENID SCHOOL BUILDINGS

A safety inspection plan, originated in the Enid, Okla., school system in the fall of 1939, and having had its first practical application in January, 1940, is receiving widespread attention in the Southwest.

In brief, the plan provides for rigid monthly inspections of every Enid school building, from basement to roof, inside and the surrounding grounds; of boilers, flues, gas lines, sanitary facilities, and schoolrooms and halls. On the monthly score sheet there are 43 safety items to check. Five of these concern fire hazards.

In discussing the plan, the editor of the *Enid Daily Eagle* writes:

"The monthly inspections are made by Charles Ethington, school-board clerk, who originated the system; Vernon Duckett, superintendent of buildings and grounds; the principal of the school being inspected, and a custodian from another school. Each item is graded, with a possible score of 100, and an 'A' rating (good only for one month) being awarded to those schools where a score of 90 or more is reported. Last month, 14 of the 15 Enid schools received the high rating.

"Surely such a plan, if adhered to and followed out regularly, should result in greater all-round safety, both on the playgrounds and in the school buildings. Rubbish and branches on the grounds may cause falls, as may mops or buckets or brooms left standing in the halls. Unclean drinking fountains or toilets may spread disease. Uninspected gas lines and boilers may cause fatal explosions. Carelessly stored materials may mean serious fire hazards.

"As buildings, Enid schools are comparatively safe insofar as ordinary fire hazards go. But it is the unusual that causes the really serious school tragedies; sometimes it is little things overlooked in the regular work by custodians or teachers which cause the worst of these tragedies. The monthly school inspection system is a move toward greater safety, and should be improved and extended as experience indicates. Enid wants its

school children not only to be educated, but to be safe insofar as it is humanly possible to achieve safety; and the school authorities are to be commended for this added contribution to that end."

### LUBRICATION OF STATE MOTOR CARS

The annual lubrication cost of state-operated motor vehicles in Kentucky will be reduced by no less than 33 per cent, as a result of findings by the Technical Research Bureau of the Kentucky Highway Department, located at the University of Kentucky.

The announcement, made after eleven months of intensive study, disclosed that oil used in state-owned vehicles was good for twice, and in some cases, three times the length of service that had been regarded as a maximum. Analysis of drainage samples revealed, it was said, that the lubricant was developing no faulty qualities in the usual period between drains.

The Kentucky Highway Department's Technical Research Bureau at the University of Kentucky is unique, in that it is the only one of its kind in the United States, and was started a little less than a year ago when David C. Scott, a chemistry student at the University became interested in lubrication problems. After a few startling laboratory revelations, Scott outlined plans for a research bureau to Chief Engineer Thomas H. Cutler, and the bureau was authorized. The University's technical research bureau cooperated with the highway department by extending to it full use of equipment, laboratories, and technicians.

Soon after the research work began, Scott and his coworkers made such discoveries in relation to lubrication, cylinders, pistons, and bearings that the U. S. Bureau of Standards and the Works Progress Administration were attracted. Along with the University and the highway department, the Bureau of Standards and the WPA have contributed financially to further the bureau's efforts, and the U. S. Army and Navy have assisted materially with the research.

### COMING CONVENTIONS

- March 13-15. South Carolina Education Association, at Greenville. J. P. Coates, Columbia, secretary.
- March 14-16. Alabama Education Association, at Birmingham. F. L. Grove, Montgomery, secretary.
- March 14-16. Georgia Educational Association, at Macon. Ralph L. Ramsey, Atlanta, secretary.
- March 15-16. Annual Junior High School Conference, at New York City. Dr. Orlie M. Clem, New York, secretary.
- March 15-16. Oregon State School Superintendents' Association, at Salem. J. W. King, LaGrande, secretary.
- March 27-28. Florida Association of School Boards, at Orlando. C. E. Miner, Clewiston, secretary.
- March 27-30. Mississippi Education Association, at Biloxi. W. N. Taylor, Jackson, secretary.
- March 28-30. Florida Education Association, at Orlando. James S. Rickards, Tallahassee, secretary.
- April 1-3. Northwest Association of Secondary and Higher Schools, at Spokane. Paul S. Filer, Spokane, secretary.
- April 3-5. Inland Empire Education Association, at Spokane. Carl Ferguson, Spokane, secretary.
- April 3-5. North Central Association of Colleges and Secondary Schools, at Chicago. Ill. G. W. Rosenlof, Lincoln, Nebr., secretary.
- April 12-13. Wisconsin Association of School Boards, at Milwaukee. Wis. Letha Bannerman, Wausau, secretary.
- April 12-13. Wisconsin City Superintendents' Association, at Milwaukee. J. H. Murphy, New Holstein, secretary.
- April 16-20. Public-School Business Officials of the State of California, at San Diego. A. P. Mattier, Compton, Calif., secretary.
- April 21-23. Tennessee Education Association, at Nashville. A. D. Holt, Nashville, secretary.
- April 23-25. American Association of Collegiate Registrars, at St. Louis, Mo. E. C. Miller, Chicago Ill., secretary.
- April 20-May 3. Association for Childhood Education, at Milwaukee. Wis. Mary E. Leeper, Washington, D. C., secretary.

### NEWS OF OFFICIALS

- MR. THOMAS F. McDONALD has been elected president of the board of education at Lakewood, Ohio.
- MR. H. C. SCHOFF has been elected president of the school board at Cadillac, Mich.
- SUPT. J. F. HUGHES, of Eldorado, Kans., has been re-elected for his fourteenth year.



# The CAR-NA-VAR Record

## OF FLOOR MAINTENANCE

CONTINENTAL CAR-NA-VAR CORPORATION, 1562 E. National Ave., Brazil, Indiana

### NEW YORK SCHOOL CUTS FLOOR MAINTENANCE COSTS 1/2 WITH CAR-NA-LAC AND CAR-NA-VAR

Find Car-Na-Var Treatments Outwear Ordinary Waxes . . . Save on Maintenance Labor . . . . .

MINOA, N. Y. — After 3 years use, the Minoa Grade and High School reports that they are now using Car-Na-Lac and Car-Na-Var in corridors and classrooms at one-half the cost of methods previously employed. Car-Na-Lac for 25,000 sq. ft. of mastic and Car-Na-Var for 4,500 sq. ft. of maple.

"In this school, the younger element prevails and they give the floor harder usage than older pupils do," say the Custodians. "The Car-Na-Var treatments stand up under this rough use, are non-slippery and save much labor. Both Car-Na-Var and Car-Na-Lac outwear ordinary wax treatments by far.

#### Restores Badly Worn Floors

"Furthermore, the Car-Na-Var method of floor treatment has eliminated the badly worn condition of our floors and has given them a uniform, high gloss finish that is easy to maintain."

Car-Na-Var is the original varnish-gum and wax floor treatment that combines the durability of varnish and scratch-resisting qualities of wax. This heavy-duty treatment WILL OUTWEAR ANY WAX ON THE MARKET.

Car-Na-Lac is radically different from all other self-polishing floor treatments. Applied like liquid wax, it levels itself out and dries like lacquer . . . to a brilliant streakless lustre requiring no buffing.



Minoa Grade and High School, Established 1915. Present enrollment 400 students.

#### One Coat of Car-Na-Var Keeps Floors Sealed and Waxed for Entire Year

EVANSVILLE, IND. — "With one coat of Car-Na-Var once a year, our floors are sealed and waxed in one process, and application and maintenance costs thereby reduced," say the Central and Reitz High Schools of this city.

#### Solves Dust Problem Eliminates Slippery Floors

In addition to lower maintenance costs, Evansville's High Schools consider Car-Na-Var treated floors a vast improvement from the standpoint of sanitation and safety. Untreated or natural wood floors were found to be much too dusty and the use of floor oil to overcome this proved entirely unsatisfactory. Car-Na-Var acts as a seal against dust, they say, and at the same time it has given them a good finish which is neither slippery nor greasy.

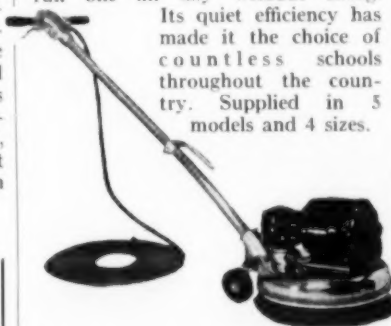
Write for free demonstration!

#### FOR EXTRA ECONOMY MOUNT DIABLO BUFFS WITH SILENT CHIEF

CONCORD, CALIF. — "In the interest of economy," says Mount Diablo Union High School, "for safe non-slippery floors . . . and to maintain that spic and span appearance, we buff with our Silent Chief Electric Floor Machine."

Swift and silent! . . . the Silent Chief is super-powered by special geared-head ball-bearing motor for maximum efficiency. Yet it is so perfectly balanced a woman could run one all day without tiring.

Its quiet efficiency has made it the choice of countless schools throughout the country. Supplied in 5 models and 4 sizes.



Free Demonstration on Your Own Floors!

#### Free Book!

Not mere sales propaganda . . . but a handy book of practical "do's" and "don'ts" by floor maintenance experts. Write for copy today. No obligation.



Mt. Diablo Union High School.

### California High Finds Way to Seal Oil-Soaked Floors!!

#### It's Car-Na-Seal

CONCORD, CALIF. — Car-Na-Seal now replaces former treatments of floor oil, varnish, shellac, lacquer and ordinary wax in the Mount Diablo Union High School, according to Building Custodian, R. A. Macey . . . who finds that "its smooth, tough, flexible surface takes lots of hard use, is easier to repair and maintain." Since using Car-Na-Seal, this school reports, formerly oil-saturated floors are effectively sealed against dust. Splintering of pine floors has been eliminated. Car-Na-Seal also gives an excellent finish to floors of linoleum, cork carpet and concrete composition, as well as desk tops, seats and tables.



Car-Na-Seal acts as a deep-penetrating seal for porous wood floors. Excellent undercoater for Car-Na-Lac. Made entirely from bakelite-type resins, it is tough and pliable as leather. The ideal finish for gymnasium floors. Non-slippery. Will not scratch or rubber-burn. Resists alkali and acid. Write for free demonstration on your own floors.

#### WHICH TO USE FOR YOUR FLOORS . . .

**CAR-NA-VAR**  
THE PERFECT FLOOR TREATMENT

Use Car-Na-Var if you have an electric floor machine and the necessary labor available for an occasional buffing. Car-Na-Var requires more initial labor but is longer lasting, more permanent. Use Car-Na-Var if you have "raw" wood floors and do not wish to use a sealer as an undercoater. (Note: Car-Na-Var should not be used on rubber or asphalt tile.)

**CAR-NA-LAC**  
LACQUER-LIKE FLOOR FINISH

Use Car-Na-Lac if you do not have a floor machine or buffer. Car-Na-Lac is self-polishing. May be used on any smooth, sealed or non-porous floor.

CONTINENTAL CAR-NA-VAR CORPORATION  
1562 E. National Ave., Brazil, Indiana

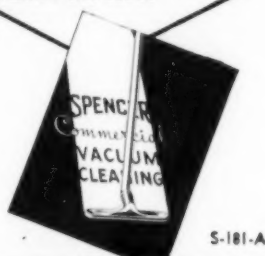


How will they clean the floors, the walls, erasers and boiler tubes in your new school? Can you picture any other method as flexible, thorough, easy to use and as low in cost in the long run as the Spencer Vacuum Cleaning illustrated here? The great majority of educators and architects would say, "No—there is no better way."

The Spencer System is used in more than 2500 schools. It is far more powerful than ordinary vacuum cleaners. Special vacuum tools clean all surfaces including cement and linoleum. All dirt and dust goes to containers in the basement.

The Spencer System is dependable and built to last for years.

Ask for the new Spencer Bulletin on Commercial Vacuum Cleaning. Shows how it is used, what it saves. Ask for Bulletin No. 121-R.



**SPENCER** CENTRAL AND PORTABLE  
HARTFORD VACUUM CLEANING SYSTEMS  
THE SPENCER TURBINE COMPANY, HARTFORD, CONN.

## THE SCHOOL SYSTEM AND THE CITY

(Concluded from page 50)

the contamination of politics, even dirty politics, and even the deadening efficiency of what is often called "good city government." Education is not a thing apart from the communal life; it is of its essence. Education in elementary and high school and even college cannot stand aloof to judge, it must participate. It does not exist to make the chart of the new civic order, it must find its place alongside of other instruments of the population. There will be no talk of independence or isolation then. Administrative centralization will appear for what it is: a mechanistic, life-stultifying social means. The school administration will return to its place in the whole nexus of the city life.

In this consideration of the relation of the school and society in the city, the problems are raised which embody the more important issues,

and the results sought are not in terms of authority or organization but in terms of the education of the people. The service aspect rather than the authoritarian aspect of the state will be emphasized. It will become, as I long ago pointed out, merely overhead machinery.<sup>27</sup> Its service will be a staff service, to make available whatever experience or plans or programs will be helpful in the local situation. It will present them as educational means. It will present them not as models to be imitated, but as processes to be studied. It will have no concern with an eclecticism, which is merely a confused mass of disparate practices with a semblance of unity. Its plan will not be of the character of some that are described by Mumford as a dodge to evade the realities of life, and to avoid the responsibilities

<sup>27</sup>For a recent statement see Fitzpatrick, *I Believe in Education* (Sheed and Ward, 1938), pp. 183-89. See introduction to Fitzpatrick, *Experts in City Government* (Appleton, 1919). See also Survey, Sept., 1923, on "Education's Desperately Human Problems."

of action. It will recognize that "publics" must be genuinely educated in social proposals and not merely indoctrinated within the doctrine of the legal responsibility of the state. This conception of the value of the service it should render may be, should be, wholeheartedly accepted.

## NYA IN SCHOOLS

Nineteen million lunches were served to needy school children during the last fiscal year (1939) by youth employed by the National Youth Administration. According to a recent statement of Aubrey Williams, NYA administrator, NYA service and projects have been operated in communities throughout the country and have provided many useful articles for the use of local charitable institutions and for distribution to needy families by local relief authorities.

Activities of the NYA have included sewing and renovation of clothing, repairing of shoes, repair of household articles, renovation and cataloging of museum articles, and construction and repair of tools and mechanical equipment. The work program, sponsored by this organization, provides part-time employment for needy out-of-school youth between the ages of 18 and 24 on useful projects sponsored by local public agencies.

## SCHOOL ADMINISTRATION

♦ The school board at Lincoln, Nebr., has appointed Mr. Cecil E. Stanley supervisor and coordinator of distributive education. He will be in charge of both day and night classes in this subject.

♦ Lincoln, Nebr. The school board has voted to purchase a radio and public-address system for the high school, to cost approximately \$3,055. The system will provide a radio speaker in each classroom, and will include a main control in the school office.

♦ The faculty of the Colorado State College of Education at Greeley has announced that the name of the elementary school will be changed to the Ernest Horn Elementary School, in honor of Dr. Ernest Horn of Iowa State University. The change in name will become effective next summer when the celebration of the Golden Anniversary of the College will take place. Dr. Horn, who formerly taught in the elementary school of the College, is now Professor of Elementary Education in the University of Iowa.

♦ The White House Conference on Children in a Democracy has received a report in which it is shown that America is making great technological progress but that there is a serious lag in art, morals, and religion. The report shows that 16,000,000 to 30,000,000 children between 5 and 17 years receive no formal religious instruction, though religion is one of the great bulwarks of democracy.

The report declared that it was never intended that the separation of Church and State should deprive children of the resources of religion. The child needs to have a conviction of his own worth as a person and also a conviction that he has a significant and secure place in a rational and moral universe, and this can hardly be achieved without religious training.

Though more than one half of today's children receive no real religious training, the report sees hope in the growing appreciation of religion's place in democracy and the growing attempt of religious groups to cooperate in achieving common ends.

♦ The American Association of Junior Colleges has received a grant of \$25,000 from the General Education Board of New York City, to finance a series of research studies in the general field of terminal studies in the junior college. It is expected that the study will reveal the need and opportunity for a series of additional studies and experimental investigations and demonstrations will cover a period of several years. The study which will include a large proportion of the junior colleges of the country, will be sponsored by a nation-wide committee, which will be in charge of an executive committee, headed by Dr. Walter Crosby Eells, of Washington, D. C.





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## News of Superintendents

• Supt. WILLIAM F. VOGEL, of Jeffersonville, Ind., has been appointed a member of a committee of the State Board of Education which is to study the problem of adult education.

• ADEL HANSON, of Carrollton, Ill., has resigned from the superintendency in order to complete his course in school administration at Columbia University. He will receive his doctorate in June.

• Supt. A. D. OWENS, of Newport, Ky., has been re-elected for a term of four years. He has completed sixteen years of service as superintendent.

• Supt. O. E. HUDDLE, of Columbia, Ky., has been re-elected for a four-year term.

• Supt. E. O. MUNCIE, of Madison, Ind., was presented with a pen and pencil set by the teaching staff upon the completion of twenty years as superintendent of the city schools.

• The school board of La Crosse, Wis., has reorganized with the re-election of WILLIAM L. ROSSITER as president, and MRS. GEORGE LUECK as vice-president.

• MR. CRAIG P. MINEAR, of Idaho Springs, Colo., has been elected superintendent of schools at Fort Collins, effective July 1.

• Supt. EMIL ESTENSON, of Blooming Prairie, Minn., has been re-elected for a third term, at a substantial increase in salary.

• Supt. P. H. HOPKINS, of Somerset, Ky., has been re-elected for a four-year term.

• PEARL WINDSOR, of Iron River, Mich., has been re-elected for a two-year term.

• MR. DAVID H. PATTON, of Toledo, Ohio, has been elected superintendent of schools at LaGrange, Ill. He succeeds J. C. DAVIES, who is retiring at the end of the school year in June.

• MR. W. C. ROBINSON has been elected superintendent of schools at Abilene, Kans. He was formerly principal of the Abilene Junior High School.

• Supt. J. D. BLACKFORD, of Hicksville, Ohio, has been re-elected for a two-year term.

• Supt. W. W. CHRISTENSEN, of Idaho Falls, Ida., has been elected vice-president of the Idaho Education Association.

• MR. GEORGE H. GEYER, of Westwood, Calif., has been appointed director of the junior college at Glendale.

• DR. HENRY J. GERLING, superintendent of the city schools of St. Louis, Mo., has submitted his resignation to the board of education and it has been accepted.

• DR. RAY E. CHENEY, of River Forest, Ill., has been elected superintendent of schools at Elizabeth, N. J., for a four-year term, beginning July 1. He will succeed Dr. Ira Chapman, who is retiring after sixteen years of service.

• Supt. H. B. SELF, of Rising Star, Tex., has been re-elected for a third term.

• Supt. CLYDE PARKER, of Washington, Ind., has been re-elected for a term of five years.



**Craig P. Minear**  
Superintendent-Elect  
Fort Collins, Colorado.

Mr. Minear, who has been superintendent of schools at Idaho Springs, is a Coloradan by birth and holds a master's degree from the University of Iowa. He has taught in the Iowa schools and has been superintendent at Georgetown and Idaho Springs, Colorado.

• Supt. F. M. MAXWELL, of Holbrook, Nebr., has been re-elected for another year.

• Supt. R. C. HALL, of Little Rock, Ark., has been re-elected for a two-year term, beginning with July 1. Mr. Hall was elected superintendent in 1909, after serving for six years as principal of the grammar school.

• Supt. HOWARD D. CRULL, of Birmingham, Mich., has been re-elected for the next school year. He was made acting superintendent in October, 1936, and in 1937 was elected as superintendent. In 1939 has been re-elected with a two-year contract.

• MR. CHARLES F. MILLER, former State Superintendent of Public Instruction of Indiana, and a former superintendent of schools in Indianapolis, on February 5, was presented with a gold pin and the Distinguished Service Award of the Indiana Town and City Superintendents' Association. The award is given annually to school superintendents who have served twenty-five years in Indiana cities.

• Supt. J. PAUL CRODIAN, of Peru, Ind., has been re-elected for a three-year term. He has completed six years of service in the Peru schools.

• Supt. WILLIAM T. DARLING, of Wauwatosa, Wis., is resigning from the position on June 30, after the completion of sixteen years of service.

• MR. FRANK SWEENEY has been elected superintendent of schools at Newburyport, Mass. He succeeds Charles R. Thibadeau.

• MR. HAROLD W. TRAISTER, of Beaver Falls, Pa., has been elected superintendent of schools at Grove City. He succeeds the late H. M. B. Lehn.

• Supt. BEN G. GRAHAM, of Pittsburgh, Pa., was recently guest of honor at a dinner given by Phi Delta Kappa, in Pittsburgh. Among the speakers at the dinner were Sherwood D. Shankland, secretary of the American Association of School Administrators, and Alexander P. Reed, of the board of education of Pittsburgh.

• Supt. D. W. BRIDGES, of Ft. Thomas, Ky., has been re-elected for a four-year term.

• The Indiana City and Town Superintendents' Association, at its annual meeting in Indianapolis, on February 8, conferred the distinguished service award on Jesse W. RIDDLE, former superintendent of schools of Lawrenceburg, Ind. Two other schoolmen, T. A. MOTT, of Seymour, and CHARLES F. MILLER, of Indianapolis, were given similar honors.

• DR. CLEMENT T. MALAN, of Terre Haute, Ind., has announced his candidacy for State Superintendent of Public Instruction for Indiana on the Republican ticket.

• MR. GUY W. POWERS has been elected superintendent of schools at Brattleboro, Vt. Mr. Powers, who assumes his new duties on July 1, will succeed Miss Florence M. Wellman, who is retiring after thirty years of service.

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### *Personal News of School Officials*

- Mr. HARVEY B. HARTSOCK has been elected president of the school board at Indianapolis, Ind.
- Dr. R. W. JONES has been elected president of the school board at Newark, Ohio.
- Mr. JOHN E. WEISER has been elected president of the school board at Wooster, Ohio.
- Mr. WILLIAM MACLEOD has been re-elected president of the school board at Newport, R. I.
- The board of education of Cleveland, Ohio, has reorganized with the election of JOHN E. O'DONNELL as president; MR. THOMAS J. MARTIN as vice-president; and KARL K. MORRIS, clerk-treasurer.
- The school board of Omaha, Nebr., has reorganized with the election of GEORGE W. PRATT as president, and MRS. MARY BATH as vice-president.
- Mr. W. M. GLASGOW has been elected president of the school board at Jonesville, Mich.
- Mr. FREDERICK HARRINGTON has been elected president of the school board at Everett, Mass.
- Dr. FRANK P. ALU has been re-elected as president of the school board at Ansonia, Conn.
- The board of education of Cincinnati, Ohio, has reorganized with the election of CHARLES EVANS as president; LEON LAUERMAN as vice-president; and Miss EMMA L. JUNGBLUT as clerk-treasurer.
- The school board of Worcester, Mass., has reorganized with the election of HAROLD W. EATON as president; MR. ALBERT FARNSWORTH as vice-president; and MR. WILL A. GRAY as clerk and business manager.
- Supt. JOHN SHEFFIELD, of Cherryvale, Kans., has been given a leave of absence for the second semester, to complete his graduate work for a doctor's degree at the University of Southern California in Los Angeles.
- Mr. LOUIS J. RIOPELLE, a member of the school board at Ecorse, Mich., died on January 17. He had been a member of the board for twenty-eight years.
- The board of education of Blooming Prairie, Minn., has reorganized with the election of C. A. PETERSON as president; Dr. B. D. BETLACH as secretary; and WARD MORTON as treasurer.
- The school board at Hicksville, Ohio, has reorganized with the election of GLENN HOTTMAN as president; G. M. BURGOYNE as vice-president; and P. J. MURPHY as clerk.

- Mr. LOUIS B. ESSELMAN has been elected president of the school board at St. Bernard, Ohio. EDWARD MEINERS was elected vice-president, and FRED HERBERS was named clerk-treasurer.
- Mr. J. G. DENHARDT has been re-elected president of the school board at Bowling Green, Ky.
- Mr. G. N. COMBS has been elected president of the school board at Ludlow, Ky.
- PAUL C. THOMAS has been elected superintendent of buildings and grounds at Wooster, Ohio.
- The school board of Glendale, Ohio, has reorganized with the re-election of ROBERT LOVETT as president; CARL LEHMANN as vice-president; and LAWSON WHITESIDES as clerk.
- Mr. HENRY J. WARNER, JR., has been re-elected as president of the school board at Rossford, Ohio.
- ERWIN FAUSZ has been elected president of the school board at Waterville, Ohio.
- Mr. LOUIS S. SCHWEITZER has been elected president of the school board at Berea, Ohio.
- The school board of Savannah, Ga., has reorganized with the election of Dr. HERMANN W. HESSE as president; MRS. J. K. QUATTLEBAUM as vice-president; MRS. VIRGINIA L. HEARD as secretary; and CHARLES F. GROVES, treasurer.
- The school board of Decatur, Ga., has elected FRANK THOMAS as president, and MRS. WILLIAM SCHLEY HOWARD as vice-president.
- The school board of Newnan, Ga., has elected W. L. STALLANS as president; B. M. BLACKBURN as vice-president; and MRS. FRANCES A. JONES as secretary-treasurer.
- Dr. WILLIAM H. BRISTOW, of Shippensburg, Pa., has been appointed assistant director of the Bureau of Reference, Research, and Statistics in the New York City schools. He was formerly dean of instruction at the State Teachers' College in Shippensburg.
- Mr. GEORGE W. GRILL, for twenty years secretary of the school board at Lakewood, Ohio, has resigned to accept a position with the Cleveland Clinic Foundation.
- Dr. ROBERT L. COOLEY, first director of the Milwaukee Vocational School, has resigned because of ill health.
- Dr. F. E. KING has been re-elected chairman of the school-board committee of the whole at Omaha, Nebr. Dr. C. C. HALL was named vice-chairman.
- The board of education at Wildwood, N. J., has reorganized with the election of MARCUS A. FATH as president; ARNE RASMUSSEN as vice-president; and HARRY T. TENENBAUM as solicitor.
- CHARLES A. BROWN, a member of the board of education of Union City, N. J., was recently presented with the Distinguished Service Award for 1939, by the New Jersey State Education Association. Mr. Brown has been a member of the board for seventeen years.

- Mr. MARK D. EAGLETON, president of the board of education of St. Louis, Mo., has announced that he will resign from the board. His announcement is the second by a board member of an intention to resign.
- Mr. Eagleton gave as reasons for resigning the board's refusal to take steps to oust Richard Murphy, degeneration of board meetings into "kangaroo courts," and the excessive amount of time board membership now requires.
- The school board of Athol, Mass., has reorganized with the election of FRANK W. WILSON as president; Dr. FRANCIS X. DEFAULT as vice-president; and WILLIAM A. SPOONER as clerk.
- Mr. JOHN SCOTT, JR., of Maynard, Ohio, has been elected president of the Belmont County board of education.
- The school board of Covington, Ohio, has elected C. E. WARNER as president.
- DAN SANTRY, JR., has been elected secretary of the school board at Colorado Springs, Colo. He succeeds T. J. Fox.
- Mr. EDWARD COUSINS has been elected president of the school board at Billerica, Mass.
- Mr. GEORGE P. NEOPOSTITOS has been elected president of the school board at Dracut, Mass.
- Dr. MAURICE E. TROYER, formerly associate professor in the School of Education, Syracuse University, has accepted a full-time position as co-ordinator of evaluation with the Commission on Teacher Education of the American Council on Education. Dr. Troyer, who became a member of the staff in September, 1936, has been instructor in educational psychology and chairman of the committee on selection of candidates for admission to the All-University School of Education. Mr. Joseph Romoda has been placed in charge of the selection program, and Dr. Lucien Kinney will teach the graduate courses in educational psychology.
- Dr. FRANK P. GRAVES, Commissioner of Education for New York State, is retiring from the position at the close of the school year in June, when he will have reached the mandatory age limit for active service.
- Mr. A. E. WELLS, of Gladewater, Tex., has been elected superintendent of schools at Union Grove.
- Supt. EARL WOOD, of Alexandria, Ind., has been named to the executive committee of the Indiana City and Town Superintendents' Association.
- Mr. C. H. OMAN, who has been superintendent of schools for 38 years, has been unanimously re-elected for the year 1940-41. Previous to his present position he was principal of the Garnett High School for five years. Of all the superintendents of the State of Kansas he holds the longest tenure in one sitting. For fifteen years he has furnished each member of his board of education with subscriptions to the SCHOOL BOARD JOURNAL.



## MITCHELL FOLD-O-LEG TABLES

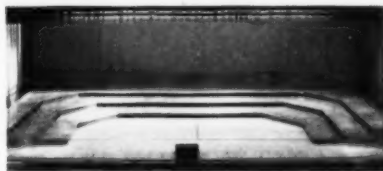
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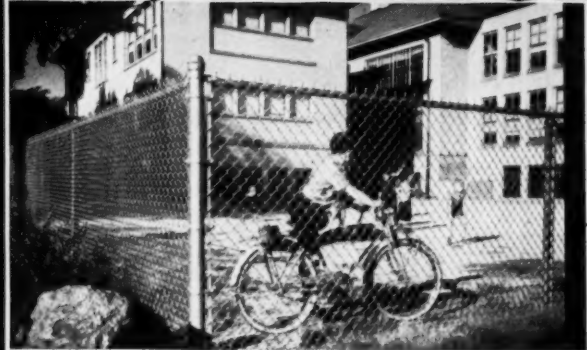
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## TECHNIQUES IN SUPERVISION FOR THE SMALL HIGH SCHOOL

(Continued from page 64)

mit, and the superintendent considers it worth while, he should be encouraged to join the N.E.A.

However, membership in organizations which are not of a truly professional character, which do not attempt to improve teaching as a *profession*, should be discouraged.

The teachers should be made familiar with the local school, its history and traditions, financial support, special problems, enrollment, achievement, and so on.

The teacher should become a part of the community; in order to accomplish this he should be given information about his community, he should be introduced to the professional and business people and the school patrons, and he should be introduced to the socially useful activities of the community. He should also be given sound advice upon financial matters. Finally, he should be advised to avoid any criticism of the community, its customs, or its inhabitants.

### Guidance Where Needed

The beginning teacher should also be given careful educational guidance and supervision during the school year. The philosophy of the school upon all of its phases should be discussed with the teacher and its implications discussed and explained to him. In addition, the ordinary supervisory processes should be carefully applied to him and to his problems.

Teachers should be counseled upon the particular school and community standards for personal traits, thus preventing violations of them as a result of ignorance.

Thus, by recognizing the need for an adequate program of induction of the new teachers into service, the superintendent of the small school provides for himself a potent tool in improving his school, in expanding his efforts at supervision.

(To be continued)

## PULASKI HIGH SCHOOL

(Concluded from page 58)

building value. More especially will this be necessary if this building is being considered in comparison to other known buildings. In an article such as this it is not possible to present enough information to enable such costs as might be given to be of value. It is quite possible they may be misleading. The contracts for this building were awarded in December, 1937, at the peak of the rebound in the building-cost-index curve following the depression of 1930 to 1933. See Sketch III. The subject of comparison of building costs was presented by the author in the *SCHOOL BOARD JOURNAL*, January, 1935. Comparative cost information is given in the following table covering the seven most recent Milwaukee high-school buildings. The first column (A) gives the actual cost in dollars. The second column (B) gives the cost per



*Typical stairway, Pulaski High School, Milwaukee. The stairways are splendidly lighted and are planned for minimum cost of upkeep.*

square foot of educational area as adjusted to a uniform cost level, that of 1926.

	(A)	(B)
1. Riverside — 1912 . . . . .	\$ 510,327	\$12.02
2. Washington — 1913 . . . . .	514,317	11.64
3. Bay View — 1919 . . . . .	1,095,927	10.99
4. Lincoln — 1928 . . . . .	1,174,238	11.33
5. Juneau — 1931 . . . . .	850,884	11.17
6. Rufus King — 1932 . . . . .	1,081,064	9.22
7. Pulaski — 1937 . . . . .	2,407,256	12.28

Reference to the cost-index graph, Sketch III, shows that Rufus King contracts were awarded at almost the depth of a depression and that Pulaski contracts were awarded at the peak of an inflation. Much of the detail and methods of construction of the Rufus King and Pulaski schools were identical. They are twin buildings. Pulaski's size in volume is approximately 25 per cent greater than that of Rufus King school. It is obvious that there were influences which had a bearing on the cost of Pulaski High School which are not represented by the type or details of construction and which are not corrected by the use of the building-cost index.

### SCHOOL ADMINISTRATION

♦ Girard, Ill. The high school has passed a rule that any student whose average is 90 or over, and who has not been absent over five times during the semester, will be exempted from the semester tests.

♦ St. Charles, Ill. The adult evening school has an enrollment of 175 students, distributed in ten class groups. Among the subjects offered are shop mathematics, shop drawing, bookkeeping, English, shorthand, and typewriting. An advisory council has been formed, comprising twenty members, two from each class group.

♦ Alma, Mich. The distributive-education class, sponsored by the school board, has reopened for the second semester, with courses in retail salesmanship and general salesmanship.

♦ Springfield, Ill. With the opening of the second semester, the rental book system has been placed on a city-wide basis. Rental fees for books range from fifteen cents to one dollar per pupil depending on the grade of the school.



## VACUUM CLEANING IN THE SCHOOLS

(Concluded from page 36)

a cloud of dust, but vacuum will keep this dust out from the very center of the mat.

### Cleaning Gymnasium Floors

Many of these cleaning problems were not with the schools fifty years ago. They have grown with the improvements that came with the modern schools and easy solutions were necessary. In 1926 New York City appointed a building committee to make a thorough investigation of vacuum cleaning. Based upon their recommendations a resolution was passed by the board stating:

Whereas on account of the extensive use of high- and secondary-school buildings and the larger type of elementary-school buildings, the committee on buildings and sites believes that the more sanitary method of cleaning by vacuum should be provided for in all such new buildings hereafter constructed, especially since a comparatively small sum is involved in connection with the installation of a vacuum-cleaning system when installed during the course of construction; therefore be it

Resolved, that the board of education hereby decides that in all new high- and secondary-school buildings, and in the larger type of elementary-school buildings vacuum-cleaner systems be provided for, etc.

Since that time all of their schools of these types have been equipped with stationary vacuum-cleaning systems, and a more sanitary condition maintained. This has been the trend of the times and in keeping with this demand for better cleaning methods vacuum cleaning has been constantly improved. Not only the equipment but experience has shown how the piping should be installed. Better-laid-out systems with more convenient inlet valves. Lighter and more flexible hose as well as improved tool equipment. All of these features combined have convinced the school management, as well as the janitor himself, that cleaning methods used fifty years ago are not sufficient to clean the modern school of today.

## FIFTY YEARS OF SCHOOL SEATING

(Concluded from page 43)

about as much of essential beauty as is consistent with the functional limitations. Most important is the fact that the modest school desk, besides being practical, progressive, and good looking, has added to its responsibility for the comfort and postural habits of the school child, the important function of protection for his eyesight. Perhaps the time has arrived when the school desk will be recognized as an indispensable sightsaving device, not only to help the unfortunates who are in sight-saving classes, but to help the fortunates to stay out of them.

All in all, the industry has done a good job of packing a lot of utility, durability, and appreciation of hygienic needs into its school-seating products. Its conservatism has protected school children from an immeasurable waste through freak seating

notions. There seems no end to the supply of one-idea people who would solve all the seating problems with no conception of most of them.

On the buying side, while there is a growing appreciation of refinements and use values in seating, particularly those which can be tested and measured, antiquated methods of low-bid buying still too often retard progress. These methods are based upon the false assumption that most public officials are dishonest, and the absurd assumption that dishonesty can be prevented by substituting regulations and red tape for common sense and good judgment of experienced buyers. Reduced to simple terms, it is obvious that if specifications must include several competing products, and the buyer must accept the lowest bid, cheapness is encouraged at the expense of true values and ultimate economy. Specifications should be drawn and fairly interpreted to permit of fair price recognition of quality differences, to permit buying authorities to use intelligence and discretion, or stagnation will result. Industrial research and initiative may strive for constant improvements, but the public gets what its buyers demand and pay for.

Comparing the "automatics" of 1890 with the best products of today, school seating has gone a long way in fifty years, but there are still purchasers for obsolete types who are starting a half century behind the times with seats that will easily stand a half century of use. As with kerosene lamps and cast-iron hitching posts, progress in school seating is not through the wearing out of the old but through its being discarded in the interest of progress while still able to stand up and take punishment.

## SCHOOL HEATING AND VENTILATING DURING THE PAST FIFTY YEARS

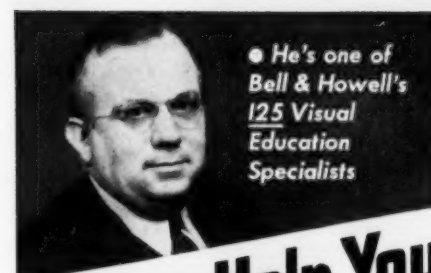
(Concluded from page 38)

ing. These units are flexible enough to meet the requirements of architects and heating engineers as well as the statutory requirements of any state.

The present unit system of ventilation makes it possible to maintain healthful, comfortable air conditions in a classroom at the lowest initial, fuel and maintenance costs.

No school heating and ventilating system is perfect. Perhaps no system ever will be. However, heating and ventilating in modern schools does make it possible for boys and girls to learn in a healthful, comfortable atmosphere — one much more conducive to securing an education than that of fifty years ago when the science of schoolroom heating and ventilating was in its infancy.

♦ School boards in village and rural school districts of Arkansas cannot legally pay for secretarial service, according to an opinion of Attorney General Jack Holt. The ruling which was given to Mr. Bryan Sims, held that it is not the intention of the legislature to provide compensation for a secretary of a board, whether he be a member of the board or other person.



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### FREE! New Film Catalogs

**SOUND**—Catalog Supplement 1940-A. Free to registered sound projector owners. Standard size, punched for loose-leaf reference with big, 92-page *Filmosound Library Catalog*.

**SILENT**—New 1940 revision of catalog of 16 mm. silent films for rental and sale. Contains many new releases.

**BRAY FILMS**—Now available from Bell & Howell is the large, well-known Bray library of educational films, sound and silent.

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## After The Meeting

### Parents' Excuses

Frederick G. Giffonello, coach of the Boys' Vocational School, at Dubuque, Iowa, has collected a number of parents' excuses that come to teachers.

The prize for succinctness is awarded to a Japanese boy who wrote:

"Ren (rain) come, no can go."

All sorts of misadventures figure in the delinquencies, such as these:

"Please, excuse Tom for being late yesterday, our clock was slow and didn't realize it."

"Please excuse Peter for being absent yesterday, as he was leaning against a no parking sign and they both fell together and he got hurt."

"Please excuse Robert as he was annoyed with his head."

"Please excuse Eddie for being absent yesterday, because he had his arm X-rayed. Also excuse him today at 2 o'clock because he must go back to the hospital to find out what became of it."

A teacher sent a note to a boy's parents, pointing out that John had astigmatism and urging that he receive immediate attention. To this came a reply:

"We don't know what it is that Johnnie has done but his father gave him a licking last night and perhaps if you would give him another today it would help."

### School Traffic Sign

In a certain county of one of the Southern states, traffic signs adjoining school buildings read:

Do not kill the children.  
Wait for the Teacher.

### Safety First

"Professor, why are you taking home such a large box of chocolates?"

"To be on the safe side. This morning my wife gave me a loving kiss—that means that it's either her birthday or our wedding anniversary."  
—*Sie und Er.*

### On His Way

Dr. Blank, of the Education Department, of the University of Wisconsin (his name cannot be disclosed here) was making a trip upstate last spring and was unable to find his railroad ticket.

"Never mind, professor," said the conductor who recognized him. "I'll pick up the ticket on my next round through the cars."

However, the good doctor became immersed in the notes of his lecture and had not found the ticket when the conductor again came along.

"Don't bother, professor. It will be quite all right if you don't find it," said the conductor.

"But, I must find it," answered the doctor. "I don't know where I'm going, without it."



### Yes

The children were being asked to find shorter words contained in longer ones.

"What can we get out of brother?" said the teacher.

"Broth," came the answer.

"Yes, and what is broth?"

Jimmy the incorrigible, with alacrity: "It's what cannibals can get out of us!"—Teachers' World.

## School Buyers' News

### Announce New Line of Basketball Backstops

The American Playground Device Company, Anderson, Ind., has announced a new line of high-grade playground and swimming-pool equipment and a line of basketball backstops.

The American backstops have been designed to meet all conditions of building structure, wall, and ceiling arrangements and have been produced after an exhaustive study of the market and of the various types of backstops available. The line includes more than twenty different backstops, adapted to a variety of conditions. Among these are (1) wall type; (2) wall-braced type; (3) suspended wall-braced type; (4) suspended wall-braced, swing-up type; (5) suspended swing-up type; and (6) portable backstops.

The firm will gladly send a copy of their latest catalog to any school official who is interested.

### New Type Blackboard Cleaner

The American Crayon Company, Sandusky, Ohio, has announced a new type of blackboard cleaner, which entirely eliminates the washing of boards of all types—slate, glass, or composition.

The "Hygeia" blackboard cleaner is a simple device, a holder which fits the hand comfortably, into which is fitted a reversible cleaner. One side—the cellular latex—eliminates the chalk marks, and the other—the lambskin side—cleans the board, removing every mark of chalk dust with one stroke of the cleaner.

The device is washable by simply removing the cleaner from the holder, and holding it under the water faucet. Complete information is available by writing to the firm at Sandusky, Ohio.

### Announce New Writing Board

A new chalkboard for schoolroom use, manufactured from a special plate glass has been announced by the Pittsburgh Plate Glass Company, Pittsburgh, Pa. The new chalkboard called Nucite, is being produced in three colors—ivory, green, black—in order to meet preferences of educators. Dark chalk is used on the ivory board, and light chalk on the green and black.

The development of Nucite is the result of a need for durable chalkboard that would lessen eyestrain. Nucite is without glare and its light colors contribute to the illumination of school rooms. The variety of colors in which Nucite is available permits the adoption of pleasing, bright color schemes in schoolrooms. Some school authorities claim lighter color schemes have a favorable psychological effect on students.

The process of Nucite makes the board shock-resistant to a greater degree than ordinary glass. If Nucite is fractured, the glass crumbles instead of breaking into sharp fragments. The new board is nonporous, nonabsorptive, and chemically resistant. Consequently, it is sanitary,



Black chalk may be used on the new buff colored chalk board made by the Pittsburgh Plate Glass Company.

odorless, nonstaining, and durable. Accelerated tests show that Nucite has 50 per cent less glare after fifteen years' service than conventional blackboards.

### Announce New Fadeproof Interior Finish

The Wood Conversion Company, St. Paul, Minn., manufacturers of Nu-Wood and Balsam-Wood, have announced "Kolor-fast" Nu-wood, the first insulating interior-finish material for which fadeproof qualities are claimed.

"Kolor-fast" Nu-wood is the result of years of research work, seeking to produce a product which could be considered a lifetime interior decoration. In the past all insulating interior finish has been subject to oxidation which has resulted in a darkening of the material.

"Kolor-fast" Nu-wood is available in tile and plank forms, in variegated and tan colors. Overall colors are slightly lighter, giving the material a higher light reflection value in keeping with the modern tendency in interior school decoration.

Complete information is available upon request.

### Announce New Lighting Equipment

Announcement has been made of a new fluorescent lamp, the "Fleur-o-Lier," which has been designed to produce lighting equipment which is efficient, durable, and safe. The lighting unit is being constructed under specifications which reflect the latest in luminaire design and is the result of a number of years of research work carried out by the Electrical Testing Laboratories.

The "Fleur-o-Lier" meets the highest standards for manufacture and construction, reduces flicker, insures high power, efficient lighting output, and satisfactory candlepower distribution.

Information concerning this new lighting unit as adapted to school use can be obtained by writing to the F. W. Wakefield Brass Co., Vermilion, Ohio.

### New Sound-Control Unit for Schools

The International Business Machines Corporation, 590 Madison Ave., New York, N. Y., has announced the production of a new No. 5 "Schoolmaster" sound-amplifying and control



The new No. 5 "Schoolmaster" sound-amplifying and distributing control unit.

unit, especially designed to furnish high fidelity, centralized sound control, and two-way communication between classrooms and central office. The device permits the reception and redistribution of broadcast programs and the distribution of programs from phonograph records played by the unit.

The "Schoolmaster" model permits the easy application of radio, microphone, and phonograph facilities to supplement formal instruction, relieves the administrative burden, and expands the school's educational capacity. Administrative and supervisory staffs can maintain more complete control of their school organizations because all classrooms are merged into one. The unit is housed in a floor-type cabinet, with controls arranged for convenient operation.

Complete information is available upon request.



## BUYERS' NEWS

## Announce New Classroom Films

The Erpi Classroom Films, Inc., 195 Broadway, New York, N. Y., has announced 22 new educational sound films, which offer a wealth of audio-visual classroom material for schools and educational institutions.

These films round out a broad program carried on during 1939 and cover a wide range of subjects, including reading, geography, history, nature study, biology, zoology, sociology, agriculture, economics, arts and crafts. Six of the films are intended for primary grades and consist of outdoor scenes, animals, and children of different countries. The films for intermediate and higher grades include Navajo Indians, people of Mexico, science and agriculture, irrigation farming, orange growing, and truck farming. Rounding out the films for the higher grades are such subjects as metal craft, plastic art, machine-shop work, and pottery making.

## Bausch &amp; Lomb Magnifiers and Readers

Unexcelled quality and real use value characterize the new magnifiers and readers, just announced by the Bausch & Lomb Optical Company, Rochester, N. Y.

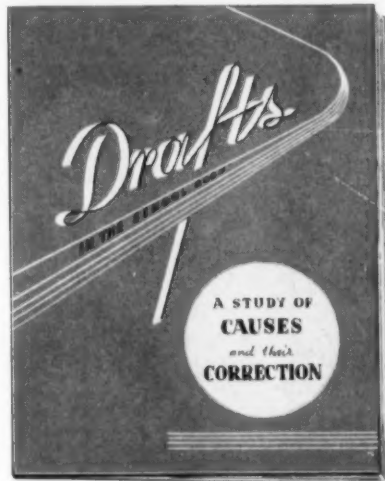
These new magnifiers fill the need for a high-quality pocket glass of moderate power and comparatively large field. The round and rectangular reading glasses are made of clear, white ophthalmic glass, accurately ground, polished, and protected from scratching by a wide chromium ring. The construction provides greater correction than the single lens, and makes it ideal for artists and those who prefer a better reading glass for general purposes. A combination magnifier and mirror has been found useful in removing cinders or other foreign matter from the eye. A utility magnifier for desk or shop use, is threaded for focusing and screws in a sturdy base. Other types of magnifiers are

the fingerprint, the linen, the engraver's, the dissecting, and the folding pocket magnifiers.

A copy of the catalog will be sent to any school official upon request.

## Dunham Offers Help on School-Heating Problem

An interesting study of an elusive problem in connection with the heating of school buildings has recently been made by the C. A. Dunham Company. The results of the study have been published in a brochure entitled, "Drafts, a Study of Causes and Their Correction," in which it is pointed out that oftentimes where heating units are considered at fault, the real causes are found in the control or operation of the heating system itself.



Dunham Brochure on Drafts offers help to school authorities.

The brochure discusses the problem from three aspects; namely, those caused by structural defects, those caused by faulty heating systems, and conditions arising from faulty mechanical ventilation, and suggests a number of simple corrections.

The firm offers to send a free copy of the brochure to any school official, or architect, who will write to the C. A. Dunham Company at 450 East Ohio St., Chicago, Ill.

## Announce New Spencer Microscopes

The Spencer Lens Company, Buffalo, N. Y., has just issued a descriptive circular, calling attention to its new line of student and laboratory microscopes for use in classrooms of schools and educational institutions. Characteristic of the line are: (1) The student microscope No. 74 is a low cost, standard size instrument for classrooms; (2) the elementary laboratory microscope No. 66 is a moderately priced instrument for use in biological work.

The routine and advanced laboratory instruments are high quality instruments for research and bacteriological work. The firm also offers an extensive line of other teaching instruments and accessories, including delineascopes, microprojectors, magnifiers, microscope lamps, and spectrometers.

Complete information is available upon request.

## PERSONAL NEWS OF SUPERINTENDENTS

● MR. ELTON THARPE, of Pleasant Plain, Iowa, has been elected superintendent of schools at Richland. He succeeds R. O. Wright.

● MR. OTTO W. HAISLEY, superintendent of schools at Ann Arbor, Mich., has been elected a member of the board of directors of the Michigan State Association of Public-School Business Officials, which held a three-day meeting in Dearborn. The president for next year is A. C. Lamb, superintendent of buildings and grounds at Wayne University, Detroit.

● SUPT. W. F. LOFER, of Shelbyville, Ind., has been elected vice-president of the Indiana City and Town Superintendents' Association.

● SUPT. G. A. DELAY, of Neodesha, Kans., has been re-elected for another year.

## ADVERTISERS' INDEX

Acme Chair Company .....	118	Gutlohn, Inc., Walter O. ....	120	Pittsburgh Corning Corp. ....	91
Albert Teachers' Agency .....	120	Hamilton Manufacturing Co. ....	74	Pittsburgh-Des Moines Steel Company .....	67
All-Steel Equip. Co., The .....	71	Heywood-Wakefield Company .....	70	Porter Corporation, J. E. ....	123
American Chain & Cable Company, .....		Hild Floor Machine Company .....	172	Powers Regulator Co. ....	Insert bet. 64 & 65
Page Fence Division .....	121	Hillyard Chemical Company .....	97	Premier Engraving Company .....	120
American Crayon Company .....	77	Holden Patent Book Cover Co. ....	72	Professional Directory .....	12
American Gas Association .....	3rd Cover	Holmes Projector Company .....	115	RCA Manufacturing Co., Inc. ....	85
American Seating Co. ....	4th Cover	Houghton, Mifflin Company .....	124	Royal Typewriter Co., Inc. ....	95
American Type Founders Sales Corp. ....	102	Hunt Pen Co., C. Howard .....	117	Rundle-Spence Mfg. Co. ....	111
Armstrong Cork Products .....	96 & 106	Huntington Laboratories, Inc. ....	88	Schermerhorn Teachers' Agency .....	120
Barber-Colman .....	119	International Harvester Co. ....	65	Sengbusch Self-Closing Inkstand Co. ....	118
Bassick Company, The .....	116	Irwin Seating Company .....	115	Sheldon & Company, E. H. ....	76
Bell and Howell .....	125	Johns-Manville Corp. ....	99	Skilsaw, Inc. ....	118
Binders Board Manufacturers .....	73	Johnson Service Company .....	20	Sloan Valve Company .....	15
Binney & Smith .....	78	Kewanee Boiler Corp. ....	14	Smith & Corona Typewriters, L. C. ....	83
Brown Company, The .....	8 & 9	Kewaunee Mfg. Company .....	68	Solar-Sturges Mfg. Co. ....	100
Burroughs Adding Machine Co. ....	87	Kimball Company, W. W. ....	117	Sonneborn Sons, Inc. L. ....	107
Celotex Corporation .....	6	Lyon Metal Products, Inc. ....	108	Spencer Turbine Company .....	110
Century Brass Works .....	116	Maple Flooring Manufacturers .....	2nd Cover	Squires Inkwell Company .....	115
Chicago Hardware Foundry Co. ....	113	Medart Mfg. Company, Fred. ....	117	Standard Gas Equipment Corp. ....	92
Christiansen Co., The .....	120	Merriam Company, G. & C. ....	124	Standard School Equipment Co. ....	86
Church Mfg. Co., C. F. ....	92	Miller Keyless Lock Co., J. B. ....	118	Stewart Iron Works Co., The .....	119
Clarin Manufacturing Co. ....	114	Minneapolis-Honeywell Regulator Co. ....	7	Strathmore Co., The .....	124
Colgate-Palmolive-Peet Co. ....	16	Mitchell Manufacturing Co. ....	121	Sturtevant Company, B. F. ....	10
Congoleum-Nairn, Inc. ....	5	Mork Green Studios .....	120	Taylor Company, Halsey W. ....	98
Continental Car-Na-Var Corp. ....	109	National School Supplies & Equipment Assn. ....	112	Tennant Company, G. H. ....	80
Contract Sales, Inc. ....	101	National Terrazzo & Mosaic Assn. ....	107	Underwood Elliott Fisher Co. ....	69
Crane Company .....	128	National Time & Signal Corp. ....	84	Universal Bleacher Company .....	123
Dayton Safety Ladder Co. ....	104	Natural Slate Blackboard Co. ....	81	Universal Scenic Studios, Inc. ....	118
Detroit Steel Products Co. ....	90	Nelson Corp., Herman .....	2 & 3	Universal Sound Projector, Div. of .....	
Dick Company, A. B. ....	1	Nesbitt, Inc., John J. ....	18	Sentry Safety Control Corp. ....	117
Ditto, Inc. ....	89	New York Blower Company .....	119 & 120	Vestal Chemical Company .....	105
Draper Shade Company, Luther O. ....	93	Norcor Manufacturing Company .....	116	Victor Animatograph Corp. ....	121
Dunham & Company, C. A. ....	13	Norton Door Closer Co. ....	123	Vogel Company, Joseph A. ....	123
Du Pont de Nemours & Co., Inc. ....	11	Page Fence Association, Div. American .....		Walrus Mfg. Company .....	94
Eberhard Faber Pencil Co., Inc. ....	102	Chain & Cable Company .....	121	Weber Costello Company .....	75
Evans Company, W. L. ....	121	Peabody Seating Company .....	79	Webster Company, The .....	103
Finnell System, Inc. ....	4	Petersen & Company .....	118	Webster & Co., Inc., Warren .....	17
Ford Sales Company, The J. B. ....	11	Peterson & Co., Leonard .....	82	World Book Company .....	124
Ginn & Company .....	120	Pick Co., Inc., Albert .....	116	Yale & Towne Mfg. ....	119



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